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United States
Court of Appeals
for the Ninth Circuit

NORTHWEST ORIENT AIRLINES, INC.,
Appellant,
vs.

GERALDINE B. GORTER, as Administratrix of
the Estate of John M. Waldrep, Deceased,
Appellee.

Transcript of Record

In Three Volumes

VOLUME III.

(Pages 769 to 1165, inclusive).

Appeal from the United States District Court for the
Western District of Washington,
Northern Division

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(Testimony of Dudley S. Cox.)

The Court: Is the information about Captain Pfaffinger the same type of information as that about Kuhn, or vice versa?

Mr. Koch: Yes, your Honor. I will offer it in evidence.

The Court: Any objection?

Mr. Riley: Yes, your Honor. May I inquire of the witness?

The Court: You may.

Mr. Riley: Mr. Cox, those three pages attached to A-25 are reports made to you subsequent to the date of the crash of Flight 324, isn't that correct?

The Witness: Yes, sir.

Mr. Riley: They were not regular training records compiled in the regular course of airline business as such records are maintained?

The Witness: Sir, this is a summary of such records.

Mr. Riley: These are taken from the records themselves, is that correct?

The Witness: Yes, sir.

Mr. Riley: I object to the exhibit, your Honor, [747] particularly the last three pages, as not being the best evidence. They are self-serving declarations of the corporation made after the date of this accident, and are not the best evidence because they refer or relate to other records which are not before the Court. I should have entertained the same objection as to A-24, and overlooked that.

Mr. Koch: I would like to ask a few questions.

The Court: You may.

(Testimony of Dudley S. Cox.)

Q. Are these prepared in accordance with the regulations of the CAA?

A. Yes, sir. The schooling and records of all pilots and flight personnel are prepared, and a record is kept of their attendance at these classes.

The Court: What about these summaries? Are they made as a part of that requirement? These summaries are something made up for your convenience rather than to answer requirements of the regulation, is that right?

The Witness: Yes, sir, that is right.

Q. Who causes these summaries to be made up?

A. I asked for them.

Q. For what purpose?

A. To assemble all the known facts about the pilot histories and training of both these pilots.

Q. Are these made from records under your supervision and [748] control? A. Yes, sir.

The Court: The objection will have to be sustained.

Mr. Koch: Your Honor, with respect to that, part of this material was included in the pre-trial order, where the only question was with respect to relevancy. We stipulated that the documents were authentic and were records of the company, and now the objection goes to the fact that they are not records of the company. That was the purpose for which the pre-trial order was entered into.

Mr. Riley: I stated they were not the best evidence. I realize they came from the records of the company and Mr. Cox ordered them to be made,

(Testimony of Dudley S. Cox.)

and they come from the company. I state they are not the best evidence.

The Court: It will have to be sustained. These cannot take the place of original records.

Mr. Koch: The first page did not fall in that category, your Honor.

The Court: The ruling stands. The objection is sustained.

Mr. Koch: May the exhibit be separated?

The Court: Certainly, if there is a part of it you think is a company record made in the ordinary course of business and it was a part of the business of the company to do it.

Mr. Riley: If you will detach the last three pages, [749] I have no objection to the first page.

The Court: Proceed. The mechanics should be done outside of the court. Take the first page off and give back to counsel who produced it the remainder. I understood there was no objection to A-25. The offer is made, is it?

Mr. Koch: Yes, your Honor.

The Court: It is now admitted, consisting of one sheet of paper on which the clerk's marks have previously been placed.

(Defendant's Exhibit A-25 for identification received in evidence.)

The Court: The next is A-26. Let opposing counsel see A-26, A-27 and A-28.

Mr. Riley: I have seen A-26, your Honor. I object to all of it, all documents of A-26. They do not

(Testimony of Dudley S. Cox.)

appear to be the original records. They were made after the date of the crash.

Mr. Koch: The first page shows the stewardess completed ditching class August 30, 1951. There is nothing there that shows that was made after the accident. In fact, I don't believe it was. It was signed by the personnel of the airline in charge of stewardess training.

Mr. Riley: Then all we have to do is have her identify it. [750]

Mr. Koch: Mr. Cox will identify it.

Q. What is the document before you?

A. It is a statement signed by L. L. Law concerning the ditching training, last completed ditching class August 30, 1951, on Northwest interoffice communication.

Q. Who is Loren L. Law?

A. He was an instructor in the ground school training department.

The Court: It is an instructor's statement as to ditching teaching?

The Witness: Yes, sir, Miss Jane Cheadle, a stewardess.

Mr. Riley: I withdraw my objection to that part of it, just to speed things up.

The Court: Do you offer Defendant's Exhibit A-26?

Mr. Koch: I do, your Honor.

The Court: Admitted.

(Defendant's Exhibit A-26 for identification received in evidence.)

(Testimony of Dudley S. Cox.)

Q. Mr. Cox, did Captain Pfaffinger and Captain Kuhn fly together as a team with some regularity?

A. With some degree of regularity, yes, sir.

Q. Handing you what has been marked Defendant's Exhibit A-28, will you identify the document? What is that?

A. This is a statement concerning the number of flights and the dates on which these two pilots flew together as a team and the station from which the flight originated, [751] and the destination point.

Mr. Koch: I offer it in evidence, your Honor.

Mr. Riley: I would object, just briefly. Mr. Cox, this is another one of the reports made after the date of the crash as part of your continuing investigation of the crash, is that right?

The Witness: Yes, sir.

Mr. Riley: It is not the original records of the flights that these pilots flew together?

The Witness: No, sir, this is not the original record.

Mr. Riley: I believe my objection is valid, not the best evidence.

Q. Where would there be original records of the flights the pilots flew together?

A. There are two sources. One is the master aircraft logs, which are large sheets about three feet long and two feet wide, which are issued by the records department and are filed. They are not issued to all departments of the company. They are available, but they are filed in dead storage or

(Testimony of Dudley S. Cox.)

something like that. The only other records that would be available would be in the monthly assignment sheets, which would cover the assignment sheets of all pilots at this particular base, and one such assignment sheet would be a file of papers perhaps four or five inches thick. [752]

Q. Is this a summary of those records?

A. Yes, sir, this is a summary of those records.

Mr. Koch: Your Honor, I think it would be impossible to produce original records except as has been done here. It does not have any self-serving purpose. It actually gathers information with respect to the activities of these two pilots.

The Court: Are you sure it does not contain comments of the compiler of the effect of the data?

Mr. Koch: None that I am aware of.

The Court: You have not tendered the originals in court for the cross examination by opposing counsel, in case he might wish to cross examine as to any one of them.

Mr. Koch: There is no editorial comment of any kind, your Honor, just a factual statement of dates, places, trips flown together.

The Court: There is no means of cross examination and it is not admissible over objection, which I understand is made, so the ruling will be as to A-28 that the offer is rejected.

Q. Was A-28 which has just been referred to prepared under your direction? A. Yes, sir.

Q. Did you examine the original records at any time?

(Testimony of Dudley S. Cox.)

A. I have seen them. I didn't specifically examine them for [753] this purpose. I have seen the original records.

The Court: May I make this suggestion? It is not admissible because it was made for the purpose of a certain event and was not made as a business requirement as the day to day business reflected in it was performed.

Q. Handing you what has been marked Exhibit A-27, will you identify that, please?

A. This is the assignments of company operating manuals to Captain J. J. Pfaffinger and First Officer K. H. Kuhn, the manuals that were assigned to them by Northwest Airlines, which they had in their possession.

Q. Does that bear a date?

A. No, sir, does not bear a date.

Q. Do regulations require an issuance of manuals to members of the crew? A. Yes, sir.

Q. And a record of the issuance to be maintained by the company? A. Yes, sir.

Mr. Koch: I offer it in evidence.

Mr. Riley: It does not say what date. Mr. Cox, do you know from where this memorandum was taken?

The Witness: Yes, sir. The memorandum was taken from the—I believe it is the printing office that maintain a record of the assignments of the manuals to the various pilots so that they will know to whom to send revisions [754] and pages of manuals.

(Testimony of Dudley S. Cox.)

Mr. Riley: Was this probably taken after the date of the crash, as your other reports were, as a part of your continuing investigation?

The Witness: I think that is correct.

Mr. Riley: Same objection, if the Court please.

Mr. Koch: There is no other source of this information, if the Court please.

The Court: If it was made up for a purpose and in a manner different from that of the company's stated record making, namely, day to day as the business reflected by the record was done, then it is subject to objection. I understand it was made up especially, and had not been an accustomed record regularly kept. The offer is rejected.

Q. Handing you what has been marked 12, is that an extract from Volume D of Northwest Airlines Mechanical Division Manual?

A. Yes, sir, this is an extract from Volume D, Mechanical Division.

Q. What does it deal with?

A. The emergency and special equipment carried on aircraft overseas.

Q. Does that exhibit prescribe the specific emergency gear to be carried by an aircraft on a flight from Tokyo to Shemya to Anchorage to McChord Field? [755]

A. Yes, sir, it does.

Q. What emergency equipment does that exhibit require to be aboard?

A. It requires a map case; navigator's equipment; driftmeter tail support, that is for the air-

(Testimony of Dudley S. Cox.)

craft; spare radio equipment; walk around oxygen bottles; an Aldis lamp; fuel dipstick holder; Very pistols; emergency winter clothing; two twenty-man life rafts and a ten man life raft, on certain configurations; life vests.

Q. How many?

A. Four life vests in the cockpit in the proper stowage positions; and C-54G's, two in the hatrack stowage over each dual passenger seat, two in the holders under cabin attendant's seat or in the right rear hatrack, and a minimum of one for each passenger and cabin attendant stowed in the hatrack stowage. Gibson Girl, that is the manual emergency transmitter. I believe that covers it.

Q. Does the manual also prescribe a regular check of this equipment? A. Yes, sir.

Q. Were checks made of this equipment on Flight 324 of the 17th at Elmendorf?

A. Yes, sir.

Q. Were they made at Seattle?

A. Yes, sir. [756]

Mr. Koch: From the pre-trial order, may I have A-12 and A-14? I think A-15 is already in evidence.

(Before flight checkout inspection marked Defendant's Exhibit A-29 for identification.)

Q. Will you identify the exhibit before you?

A. That is a before flight check out inspection on ship 601, dated January 15, 1952.

Q. Where? A. At Seattle.

The Court: What is Defendant's Exhibit A-29

(Testimony of Dudley S. Cox.)

so far as the nature of the information contained in it is concerned?

The Witness: It shows——

The Court: Just say what it is.

The Witness: It is a check list.

The Court: A check list for what kind of information?

The Witness: For pre flight inspection.

The Court: It is a pre flight inspection record, is it, or not?

The Witness: Yes, your Honor, it is.

(Before flight checkout inspection marked Defendant's Exhibit A-30 for identification.)

The Court: What is the next one, A-30? What type of information?

The Witness: It is a pre-flight check record also.

Q. A-29 was made in Seattle, did you say?

A. Yes, sir.

Q. Is it made in accordance with the inspection requirements of the company? A. Yes, sir.

The Court: You may have from now until 4:30 to finish with this witness.

Q. When is that before flight checkout inspection made?

A. It was made on January 15, 1952.

Q. When in relation to the departure of the flight?

A. Made before the departure of the flight.

Q. How long before, do you know?

A. I couldn't say that directly. It is made be-

(Testimony of Dudley S. Cox.)

fore the airplane is—at least one hour before, maybe longer.

Q. Who makes the checks that appear on this exhibit?

A. The person accomplishing the pre-flight inspection.

Q. Is he a member of the crew at the point of departure?

A. No, sir, he is not a member of the crew.

Q. Is he a member of the ground crew?

A. He is a member of the ground crew.

Mr. Koch: I will offer the exhibit in evidence.

Mr. Riley: No objection.

The Court: A-29 is now admitted.

(Defendant's Exhibit A-29 for identification received in evidence.) [758]

Q. Will you identify A-30? You have already identified it, but when and where was it made?

A. Made at Elmendorf on January 18, 1952, by a member of the ground crew at the Elmendorf station.

Q. Was that prior to the departure of Flight 324 of the 17th from Anchorage?

A. Yes, sir, prior to departure from Anchorage.

Mr. Koch: I will offer that in evidence, your Honor.

Mr. Riley: I will not object to it.

The Court: A-30 is now admitted.

(Defendant's Exhibit A-30 for identification received in evidence.)

(Testimony of Dudley S. Cox.)

Q. Referring to A-29, that is the inspection at Seattle, can you tell from that exhibit whether the emergency gear required to be aboard was on board at the time this inspection was made?

A. Yes, sir, it was.

Q. Was it? A. It was.

Q. With respect to A-30, was emergency gear on board prior to the departure of the flight from Elmendorf, according to that inspection?

A. Yes, sir, and it was on board.

Q. Does the pre-flight checkout inspection at Elmendorf deal with life rafts and life vests? [759]

A. Yes, sir, life vests, life rafts, Gibson Girl transmitter, ditching ropes, map cases, navigator's equipment, etc.

Mr. Koch: Your Honor, except for checking my notes and going over the exhibits in order to extract those that deal with material which the Court required the manual provisions as the best evidence, I have completed my examination.

The Court: You may reserve the opportunity to do that in the morning. I wish you to do it promptly in the morning.

Q. Referring to the briefing which Northwest Airlines gave its passengers before departure from Tokyo, is Exhibit A-13 a copy of the type of briefing pamphlet, ditching pamphlet, that was given to the passengers?

A. Yes, sir, that is correct.

Mr. Koch: That is all.

The Court: You may cross examine.

(Testimony of Dudley S. Cox.)

Cross Examination

Q. (By Mr. Riley): You stated that the crew would not have a duty to instruct passengers as to location of rafts, because passengers do not have a duty to launch them; and at another point in your testimony you stated it would be necessary, probably, for passengers to assist the stewardess in launching the raft in the event of emergency or crash in the water? [760]

A. She has the option of drafting passengers who are sitting in that area.

Q. If that is true, why does the pamphlet attempt to show location of life rafts at all?

A. For reassurance to the passengers boarding the flight, that there is such equipment.

Q. Can you seriously say that the location of the rafts aft of the main cabin door rather than forward will not have an adverse effect upon passengers evacuating an aircraft after a crash on the water?

A. No, sir, I don't think it would have any adverse effect on evacuating.

Q. If you were a passenger in an airplane which crashed in the water and had no emergency lights in the cabin, how would you feel your way aft of the main cabin door to search for life rafts when you were in water and water was rushing into the cabin?

A. Well, sir, I would know myself where they were and what to look for.

Q. Assuming you didn't know where they were

(Testimony of Dudley S. Cox.)

and they were not in a location as established by the ditching pamphlet which you have before you, would you go behind the main cabin door and look for them at night in the dark after a crash in the water?

A. Yes, sir, I would go behind the main door.

Q. If you knew where they were?

A. I would look all over the airplane.

Q. And it is probable that some of the passengers would look for them in this crash, in your opinion?

A. I presume so. I couldn't answer that specifically. It is probable, yes, sir.

Mr. Riley: May the witness see A-17, the flight plan?

Q. It is true, isn't it, that this aircraft flew past Annette en route to Sandspit?

A. Past Annette?

Q. Yes.

A. It was at a point southwest of Annette, on a direct line from Sandspit to Midlap Point, but being past—it was some distance southwest of Annette station.

Q. Do you know what the letdown procedures are for the Annette Air Station?

A. I am reasonably familiar with the same.

Q. Do you know what minimum altitude in the approach to the field is?

A. In the case of an operation of this nature, it probably would be 800 feet.

Q. Referring to Exhibit A-17, do you have it

(Testimony of Dudley S. Cox.)

there? A. Yes, sir.

Q. Is that the flight plan?

A. No, sir, this is the medical examination.

Q. Would you refer to the weather report shown on the flight plan and the forecast for the weather at Annette airstrip after the pilot of Flight 324 departed from Annette on the night of January 19, 1952?

A. Forecast or weather sequence?

Q. Both. I will ask you to refer to the exhibit now before you, which is A-5, the communications record. Do you have the position log and the communications record of Flight 324 before you?

A. Yes, sir.

Q. Would you refer to the communications there, the forecasts which were directed to Flight 324 after it reported it had feathered the No. 1 engine and indicate what the weather reports for Annette Island were?

A. The weather report forecasted weather for Annette Island was 1,500 feet ceiling, broken, occasionally 700 feet, obscuration, one mile visibility, light snow showers.

Q. Would you state the weather observation again at that time for Sandspit?

A. Broken to overcast, Sandspit, 2,000, broken to overcast, occasionally 1,000, overcast, one mile, light snow.

Q. Actually, there is very little difference between the forecasted reports for Annette Island as compared to Sandspit, isn't that correct?

(Testimony of Dudley S. Cox.)

Mr. Koch: I don't believe Mr. Riley should testify, [763] even on cross examination.

The Court: That objection is overruled to that question.

A. The difference being that in the remarks section of the weather report, occasionally 700 at Annette with one mile visibility, and occasionally 1,000 at Sandspit with one mile visibility.

Q. Isn't it a fact that at Annette Island Coast Guard aircraft were stationed, it would probably be the fact that they had crash equipment, fire equipment at the field as well?

A. Not necessarily so, no, sir.

Q. Have you ever seen a military air station that didn't have crash equipment?

A. Yes, sir.

Q. Is that true? A. Yes, sir.

Q. Have you been to Annette when they didn't have crash equipment?

A. Yes, sir, I think that is correct. This is before this time.

Q. But the sea-going facilities at Annette air strip are located near the air strip, is that right?

A. In the hangar adjacent to the airport.

Q. They do have a hangar adjacent to the airport?

A. They are in a hangar there, yes, sir. [764]

Q. I would like you to indicate why, if Flight 324 was not in an emergency situation after it had feathered engine No. 1, why it elected to make an emergency landing at an emergency airport?

(Testimony of Dudley S. Cox.)

A. He was required to do so by regulation.

Q. And the requirement is he would consult with the flight superintendent and land at the nearest suitable airport? A. Yes, sir.

Q. Actually, there were no such consultations to determine which was the nearest suitable airport, were there? A. I considered there were, sir.

Q. Do you consider they gave consideration to the presence or lack of crash and rescue equipment at the point of intended landing?

A. I considered that they collaborated to that extent, by the exchange of these messages where the pilot advises he is proceeding to Sandspit, the forecast of additional weather by the flight superintendent, and it is left to him, saying, "Do you intend landing at Sandspit?", and thereby, in my opinion, acquiescing in his decision to land at Sandspit.

Q. You have stated that both the pilot and flight superintendent knew that there were no crash facilities and/or rescue equipment located at the airstrip?

A. With the exception of the Coast Guard station there. [765]

Q. And that they did know there were crash facilities and personnel stationed at Annette?

A. No, sir, I didn't think I made that statement. They knew of the Coast Guard station at Annette, but I don't know of any crash facilities at Annette Island at that time.

Q. But there is rescue equipment, and that is

(Testimony of Dudley S. Cox.)

the function of the Coast Guard, isn't that correct?

A. Yes, sir, they had that airplane stationed there.

Q. You stated that both the flight superintendent and the pilot were aware when they selected Sandspit of the fact that there were no crash facilities, rescue equipment, at that point?

A. Yes, sir.

The Court: That is as far as we will be able to go tonight. Before we adjourn, I wish to finally dispose of the question, after hearing further from both sides, and while this witness is on the stand and before the cross examination of him is completed, concerning the admissibility of the copy of the statement made by this witness as manager of flight operations, under date of January 17, 1952, and marked Plaintiffs' Exhibit 28 for identification, which I understood counsel to say he acquired himself from the records of the Civil Aeronautics Board, is that right?

Mr. Riley: Yes, your Honor. [766]

The Court: And which he claimed the right, under one case he cited, to have admitted in evidence. I wish counsel for defendant would consider this over the night further.

I wish to cite for your consideration, counsel on both sides, some authorities which gave the Court assistance, and which authorities have been located particularly by our law clerk. I wish to cite an annotation in 97 L. Ed. of United States Supreme Court reports, beginning at page 738, entitled,

(Testimony of Dudley S. Cox.)

“Matters within Jurisdiction of Civil Aeronautics Board,” and particularly the comment made by this one case, I believe the one cited by Mr. Riley for the plaintiffs.

(Other cases cited by the Court were *Ritts vs. American Overseas Airlines*, 97 F. Supp. 457; *Universal Airlines vs. Eastern Airlines*, 188 F. 2d 993; an annotation in 23 ALR 2d, beginning under the heading Section 2 on page 1336; *Tansey vs. Transcontinental & Western Air*, 97 F. Supp. 458; 23 ALR 2d, page 1361, 1362; 30 ALR 2d 1159.)

The Court: I wish to dispose of the matter before plaintiff finishes his cross examination of this witness whose statement is involved.

I wish to ask Mr. Riley to remind me at this time if there is another rejected exhibit which you offered which [767] concerned anything that was objected to and the Court sustained objection on the ground it is a part of the records and files of the Civil Aeronautics Board which are excluded under Section 581, Title 49. It seems to me there were some photographs or reproductions of photographs.

Mr. Riley: The photographs, and I am not clear what the ruling was with regard to the photographs. There was a limitation.

The Court: There was a photographic exhibit which showed some objects in the water, which was admitted, but the Court said the Court would not further consider the matter, the exhibit, until you

(Testimony of Dudley S. Cox.)

have had a chance and Mr. Koch has had a reasonable chance, and I ask that be done between now and tomorrow morning, to check further the authorities, and that is the subject of my present remarks. I want you to advise me finally if there is another such offered exhibit which the Court did not receive in evidence which involves this question of privilege as to the Civil Aeronautics Board records or anything that is a part of them.

Mr. Riley: There are other portions of reports made to the CAB to which counsel did not object, which are in the record.

The Court: I ask you between now and tomorrow morning to re-identify to me any rejected exhibits as to material [768] which defendant's counsel objected to on the ground that it was CAB material.

Mr. Koch: Your Honor, in the examination of Mr. Cox, the Court rejected the exhibit, the report of the attendance of the defendant's Air Sea Rescue class by Jane Cheadle, the stewardess of Flight 324, and the exhibit with respect to the manual assignments of crew members Pfaffinger, Kuhn and Cheadle, the Court saying that they were not original records.

The Court: Made for the purpose of the defendant, which were not ordinary business purposes?

Mr. Koch: Yes.

The Court: Purposes that arose after this accident?

Mr. Koch: At the time the Court ruled, I did

(Testimony of Dudley S. Cox.)

not have before me the language of the stipulation which was entered into in this case.

The Court: You gentlemen consider the stipulation. We will go farther with it in the morning. The Court is adjourned until tomorrow morning at 10:00 o'clock.

(Court was adjourned.)

The Court: I would like to dispose of this matter of whether or not the Court should change the ruling regarding at least one exhibit. I believe I identified that one yesterday, but I am not sure that I did so accurately, and I again repeat the inquiry I made of counsel [769] yesterday, was there still a second one?

Mr. Riley: There are two, your Honor, and in addition to Plaintiffs' Exhibit 29, which are the photographs. Both of these are inter-company reports.

The Court: The specific thing I mentioned yesterday was Plaintiffs' Exhibit 28, which was a copy of a statement made by this witness who is now on the stand concerning the accident. It is a photostat copy.

Now, as to Plaintiffs' Exhibit 29, there are seventeen photographs taken in January, 1952, of portions of objects in the water. Was that one that was not admitted because it was stated by the defendant's counsel that it was a part of the mass of material collected by the CAB?

Mr. Riley: It was admitted subject to a strict condition, and I am not sure that I have the condi-

(Testimony of Dudley S. Cox.)

tion that your Honor fixed upon it, but I was restricted in examining the witness concerning the photographs at the time.

The Court: Plaintiffs' Exhibit 29 was admitted, and about that or one other one the Court said the Court was not going to study it or consider it or look at it again until we considered this question as to whether or not the defendant or the plaintiff could find any other authorities touching this subject we are now considering.

Mr. Riley: I do recall that was the Court's observation at that time. [770]

(Brief discussion re Plaintiffs' Exhibit 29.)

Mr. Riley: There was another exhibit that was rejected because it was shown on the face of it to have been published subsequent to the date of the accident. That was the letdown chart or approach plate, as the witness called it. To save the Court's time with respect to that one, the defendant has since that time introduced an approach plate which was in effect at the time, and therefore I would withdraw my offer.

The Court: You wish to withdraw your offer of it because the matter has been obviated by information received in this case?

Mr. Koch: That is incorrect, your Honor. The exhibit that Mr. Riley has reference to was introduced by the plaintiff himself.

Mr. Riley: At any rate, it was part of defendant's documents.

(Testimony of Dudley S. Cox.)

The Court: This is Plaintiffs' Exhibit 26. Do you ask that that be withdrawn and returned to counsel who presented it here?

Mr. Riley: Yes, your Honor.

The Court: Is there any objection to such withdrawal?

Mr. Koch: No, your Honor.

The Court: Plaintiffs' Exhibit 26 is now withdrawn. Now, Mr. Riley, do you still urge, and in particular, in [771] connection with cross examination of this witness, the admission in evidence of Plaintiffs' Exhibit 28?

Mr. Riley: I do not urge the admission of Plaintiffs' 28 at this time, because Mr. Cox has testified to most of it, anyway. I don't care about 28, but I have two other documents which came from the same source, of the same nature.

The Court: Do you wish to withdraw 28?

Mr. Riley: I will withdraw 28.

The Court: Plaintiffs' Exhibit 28 is withdrawn and returned to counsel who produced it.

(Further argument re records and files of Civil Aeronautics Board.)

The Court: The Court is going to make no ruling on the question of specific evidence, because it is not before it. Was there any additional authority you wished to call to the Court's attention?

Mr. Riley: No, your Honor. I would like to make an additional offer, because I have two additional documents of the same nature.

(Testimony of Dudley S. Cox.)

The Court: Have they been identified as part of the plaintiffs' case in chief?

Mr. Riley: They were not, because we were not permitted to go further.

The Court: Does it concern this witness' testimony? [772]

Mr. Riley: Yes, your Honor.

The Court: You may mark them.

(Copy of maintenance data marked Plaintiffs' Exhibit 37 for identification.)

(Copy of flight superintendent's log marked Plaintiffs' Exhibit 38 for identification.)

The Court: Let opposing counsel see them.

Q. While that is being done, yesterday you classified the various categories of airports in Northwest Airlines as terminals, alternates, refueling and emergency airports, is that right?

A. Yes, sir. One was left out. It should have been "provisional," also.

Q. Are those classifications based, if you know, upon the equipment and facilities available at the bases? A. No, sir, they are not.

Q. Why is an emergency airport classed as an emergency airport?

A. Under our operating certificate, we have terminal airports into which we make regular stops. For your terminal airports, we have so-called provisional airports, which are the same general classification as a terminal airport. An alternate airport is an airport somewhere in the general vicinity, and is so classified as an alternate airport and

(Testimony of Dudley S. Cox.)

specifically mentioned in our operating certificate as an airport that we desire to use as an alternate for a [773] terminal or provisional. A refueling airport is an airport to which you go for the express purpose of refueling. You are not allowed to discharge or take on passengers at refueling airport, alternate airports or emergency airports. All other airports not under alternates and listed in our certificate, there is some classification, and they are generally lumped under the heading of emergency airports.

The Court: Is or is not Elmendorf prominent as a so-called refueling airport?

The Witness: Elmendorf?

The Court: I mean the one at Anchorage.

The Witness: No, sir, that was not listed as a refueling airport.

The Court: It may not be for you, but what about its present status?

The Witness: A number of non-scheduled airlines use it as a refueling point.

The Court: Does any foreign airline, that is, an airline organized under the laws of a foreign nation and having service to the United States, ever stop there under the conditions that I have spoken of?

The Witness: Yes, sir.

The Court: Permission to refuel, without permission to load or unload passengers? [774]

The Witness: No, sir, I can't state that.

The Court: Did you see any statement recently in the papers about any such thing as that?

(Testimony of Dudley S. Cox.)

The Witness: No, sir, I didn't.

Q. An emergency airport—is it true to say that an emergency airport for Northwest Airlines operations in 1952 would be used in an emergency?

A. It might be used in an emergency, providing that terminal, provisional and alternate airports are weathered in and you can't land at those points.

Q. Yesterday we were discussing the aircraft in question on the morning of January 19, 1952, at Sandspit airport, and assuming a visibility of one mile; and assuming further that pilot is required to maintain an altitude of 800 feet in his approach to the airport, and that he cannot descend below 800 feet until he has the field in sight; and assuming further that he is approaching the field at a speed of 120 knots: what rate of descent would have to be established at the time he sighted the airport?

A. At 800 feet per minute or above.

The Court: Rate of descent?

Mr. Riley: Yes, your Honor.

The Court: That does not mean a thing to me.

Q. As a matter of fact, if you were within one mile of the field, at 120 knots, how long would it take you to reach [775] the field?

A. Thirty seconds.

The Court: Is that what you mean by rate of descent, the time it takes to land after starting to land?

Mr. Riley: No, sir.

Q. If you had thirty seconds to reach the field,

(Testimony of Dudley S. Cox.)

800 feet high, what rate of descent would you have to establish to make the boundary of the airport? A. 1,600 feet, not exactly.

Q. Would you tell us what the normal rate of descent of aircraft in an approach is?

A. The normal rate of descent? That can be anything under a thousand feet. A normal rate of descent is between certain limits.

Q. Would you state what those limits are, in your understanding?

A. 500 to 1,200 feet a minute I would consider normal.

Q. And, as a matter of fact, 1,200 feet would be the maximum, isn't that correct?

A. The maximum? There is no maximum allowable. You can do——

Q. Under ordinary circumstances?

A. Under ordinary circumstances, I would think that 1,200 feet would be just about the——

Q. Would you explain what we mean by rate of descent?

Mr. Koch: I am going to ask that Mr. Riley be required to restate his hypothetical question, because he [776] has assumed facts which the witness has never testified to. He has assumed in his question a visibility of one mile, altitude of 800 feet, approaching from one mile at 120 knots per hour, but that has never been the testimony, and so the witness is being asked to testify to a rate of descent far different from what his direct testimony on the point was.

(Testimony of Dudley S. Cox.)

The Court: That is sufficient.

Mr. Riley: Each of those facts has been testified to, and if that is——

The Court: Do you recall offhand in what examination?

Mr. Riley: The first instance, the exhibit shows that the reported visibility was one mile, and Mr. Cox testified yesterday he assumed he approached the field at 120 knots.

The Court: I did not get that.

Q. Mr. Cox, would you state what the normal speed in the approach to the field would be, approximately? A. Approximately 120 knots.

The Court: The Court overrules the objection.

Mr. Koch: Your Honor, that is only one part of it. The other part of the objection goes to the fact that he approached from one mile. The testimony was that the——

The Court: Is there any testimony on that point?

Mr. Riley: Mr. Cox testified that—he had just [777] testified that the pilot could not descend below 800 feet at this airport until he had the field in sight. I stated the hypothetical question that if the visibility were one mile, then he could not descend, commence his descent until he was within one mile of the field.

The Court: What statement in the evidence is there about one mile visibility?

Q. Would you state what the reported visibility at Sandspit was at the time the aircraft made its approach to the field?

(Testimony of Dudley S. Cox.)

Mr. Koch: May he have the exhibit for that purpose, Exhibit A-5?

The Court: He may. If you have the information, Mr. Cox, give it, will you, please?

The Witness: At 1:30, the weather reported at Sandspit was 2,500 feet, I believe, and the visibility was one mile. I couldn't say how much. I think it was three or four miles at 1:30.

Q. Do you recall that the visibility was restricted in snow showers to one mile?

A. Yes, sir. That was a report in the remarks of the weather report on the forecast that was transmitted to the airplane.

The Court: I would like to know what day you spoke of, at 1:30.

The Witness: January 19th.

The Court: This 1:30, was it or was it not intended [778] by you to relate to the morning hour of 1:30?

The Witness: The morning hour, yes, sir, 1:30 A.M.

Q. What exhibit do you have before you?

A. This exhibit is A-5.

Q. Would you refer to the forecast of weather at Annette as transmitted to the pilot after the engine failed? A. The forecast at——

The Court: Do not say anything. Just refer to it, look at it. Have in mind the question. I want to get finished with this question and have every preliminary thing relate to the objections which are stated. Is that what you are doing?

(Testimony of Dudley S. Cox.)

Mr. Riley: Yes, sir.

Q. Would you state the forecasted weather for Sandspit airport as it is set forth in Exhibit A-5?

A. 2,000 broken, overcast, occasionally 1,000 overcast, one mile, light snow.

Q. What does the "one mile, light snow" mean?

A. That means the visibility is one mile when those conditions occur.

Q. Is there any other reported visibility restriction?

A. No, sir, there is not reported on the forecast.

Q. Now, referring to what has been marked for identification as Plaintiffs' Exhibit 37—

The Court: That is a copy of this witness' statement [779] of February 6, 1952.

Q. Do you recall receiving this communication, dated February 6, 1952?

A. Yes, sir, I received this communication.

Q. By whom was the report prepared?

A. Mr. E. B. Curry, manager of the maintenance division.

Q. Where are his headquarters?

A. His headquarters are in St. Paul.

Q. Was this requested by you in the course of your investigation of the crash of Flight 324?

A. Yes, sir, that was part of the exhibit for the CAB.

Q. Would this report normally be prepared by Mr. Curry?

(Testimony of Dudley S. Cox.)

A. This report would be prepared at Mr. Curry's direction.

Q. What was Mr. Curry's capacity at the time he prepared this report, or directed it be prepared?

A. He was manager of the maintenance division for Northwest Airlines.

The Court: Where?

The Witness: St. Paul, Minnesota.

Q. Did he have charge of all maintenance operations of the entire airline?

A. Yes, sir, he did.

Mr. Riley: I offer Plaintiffs' Exhibit 37 in evidence, having been so identified, your Honor.

Mr. Koch: I object to it. I can't see any ground [780] under which it is admissible. The report is dated subsequent to the accident. It is a report to the CAB. It is not shown to have been made in the regular course of the company's business as a routine record is made, and this witness, while he received the report, is not personally familiar with its contentions.

The Court: There is nothing in the cross examination, so far as I can see, to which it seems to relate. I don't know whether there is anything in it that counsel offers for the purpose of contradicting the witness in any statement the witness has made orally or whether or not it is offered in any way to affect his credibility as a witness, but plaintiffs' case in chief is closed now.

Mr. Riley: Yes, your Honor, I appreciate that.

(Testimony of Dudley S. Cox.)

I understood your Honor to say yesterday as we closed court that I was to ascertain if any other reports similar to Plaintiffs' Exhibit 28 had been identified.

The Court: I was talking about those marked for identification during the case in chief. The Court referred to that and nothing else. I was not inviting counsel to go outside the record made and bring out more testimony. That was not at all in the Court's mind or intended.

Mr. Riley: Very well, your Honor.

The Court: The Court sustains the objection at this time, with leave to renew the offer if as a part of the [781] cross examination the material becomes relevant or admissible.

Q. Will you refer to what has been marked for identification Plaintiffs' Exhibit 38? Do you recognize the document and can you tell us what it is?

A. This is a log of the things done and the times at which they were done and the telephone calls made by the Seattle dispatch office.

Q. Are there reports set forth in there, and I will refer you specifically to the entry made under 2:55 Pacific Standard Time, are there messages contained in that exhibit relating to transmissions to Northwest Airlines from Annette Air Station in Annette, Alaska?

A. Sent to Northwest Airlines? Yes, at 2:55 Pacific Standard Time——

Mr. Koch: Don't give what the message is.

The Court: Do not state what is in it. It is not

(Testimony of Dudley S. Cox.)

in evidence. Just state the nature of the information contained in it, or answer his question in a way other than by reading the contents of the exhibit.

The Witness: Yes, sir.

Q. Is there an entry in the flight superintendent's log, which is identified as Plaintiffs' Exhibit 38, indicating the time at which the Coast Guard at Annette——

The Court: Could you say, referring to the time [782] when something happened, instead of indicating that it did happen then.

Q. Is there an entry contained in what is marked for identification Plaintiffs' Exhibit 38 which indicates the time at which the Coast Guard at Annette was alerted?

Mr. Koch: I object to the question again, your Honor. It is calling——

The Court: The objection is sustained with leave to ask the type question which the Court suggested was permissible, if you wish to do that. You are not required to ask any question.

Q. Referring to the first page of what has been marked for identification Plaintiffs' Exhibit 38, is there a record of any communications to and from the Coast Guard at Annette Island in Alaska?

A. Yes, sir, there is.

Mr. Riley: I offer Plaintiffs' Exhibit 38 in evidence on the statements made by the witness, and using it for the purpose of cross examination which was elucidated yesterday on direct relating to the

(Testimony of Dudley S. Cox.)

relation of Annette Island to the crash of the aircraft at Sandspit.

Mr. Koch: I object to the exhibit. Here again the witness testified yesterday with respect to there being certain facilities at Annette Island. If this exhibit confirms that fact, it is cumulative only.

It does not [783] add anything to the cross examination, that I can see, and it is still a CAB report.

The Court: The objections to it are overruled. Plaintiffs' Exhibit 38 is now admitted.

(Plaintiffs' Exhibit 38 for identification received in evidence.)

Q. I will ask you, Mr. Cox—

The Court: It would be appropriate to ask him to read any word or figure on it, or you could read any word or figure or any part of this exhibit.

Mr. Riley: If the Court please, I will direct the Court's attention to the entry made at the time indicated on the flight superintendent's log, identified as Plaintiffs' Exhibit 38, at 0252 Pacific Standard Time: "Coast Guard at Annette is alerted and will proceed to scene of crash." By ATC, Seattle. It is about midway down the page, on the first page.

The Court: You may proceed.

Q. What is the significance of that message, if any, as you understand it?

A. Well, as I understand the message, that Air Traffic Control in Seattle advised the dispatch office at this time that they had information that the Coast Guard at Annette is alerted, I presume that means, and are standing by. It doesn't really

(Testimony of Dudley S. Cox.)

mean that they have been alerted as of [784] that time.

The Court: What time was it?

The Witness: 2:52 A.M., January 19th.

The Court: Is that before or after the crash?

The Witness: That is after the crash, sir.

Q. It is a fact that Air Sea Rescue facilities at the time of this crash were not alerted until after the crash?

The Court: Is it or is it not?

Q. Is it or is it not a fact that Air Sea Rescue facilities were not alerted until after the crash of Flight 324 on the night of January 19, 1952?

Mr. Koch: Your Honor, in view of the previous testimony in this case that this is done not by the defendant but by the Government radio circuit, I think this is improperly directed to this witness.

The Court: The objection is overruled. Answer the question.

A. The Coast Guard were alerted after the crash.

The Court: Is that the question you presented?

Mr. Riley: That is sufficient answer, your Honor.

Q. The Coast Guard in this area and in the area of Sandspit is in charge of Air Sea Rescue facilities? A. That is a fact.

Q. And was it a fact in January, 1952?

A. That is correct. [785]

The Court: There is a certain date in January, 1952.

Q. Was that true on January 19, 1952?

(Testimony of Dudley S. Cox.)

A. Yes, sir, that is true.

Q. I refer you to what has been identified as Plaintiffs' Exhibit 6, and I will ask you to circle and initial the location of Annette Island airstrip.

A. Well, about where it should be?

Q. Yes. Will you initial that circle so that it may be so identified? Will you state for the record what you have marked on the map?

A. It is the approximate location of the Annette Island airport.

Q. Referring to the same exhibit, Plaintiffs' Exhibit 6, will you mark with an X and initial the spot at the approximate location, as you understand it, where Flight 324 feathered the No. 1 engine on the morning of January 19, 1952? Will you state for the record what you have marked?

A. Approximately only the position of abeam Sitka where Flight 324 feathered the engine on January 19th.

Q. Was Flight 324 over land or over water at that time? A. Over water.

Q. Will you state whether or not Annette Island was nearer to the position at which Flight 324 feathered the No. 1 engine than Sandspit?

A. Yes, sir. It was nearer on a direct line from——[786]

Q. That is sufficient.

Mr. Koch: May he complete his answer?

The Court: Yes. If you did not complete your answer, Mr. Cox, you may do so.

A. Well, a straight line from that point to An-

(Testimony of Dudley S. Cox.)

nette is closer than to Sandspit. If, however, he proceeded by the airways, it would still be closer by 22 miles, 23 miles.

Mr. Koch: Which would be closer by 23 miles?

The Witness: Annette would be closer to this particular point by 23 miles.

The Court: At what point with reference to the occurrence of the crash?

The Witness: This was at the time he feathered the No. 1 engine, at a point abeam Sitka, at about 12:03 A.M., January 19th.

The Court: Was there any other reasonably available landing place at that time other than the ones you were considering in your last answer?

The Witness: They are at a greater distance than these two.

The Court: And those two were what? Repeat, please.

The Witness: These two are Annette Island and Sandspit, and they are the closest to this particular point that he feathered the engine.

Q. Did I understand your testimony correctly yesterday when [787] you stated Annette Island had longer runways than Sandspit?

A. I believe that is correct.

Q. And the Coast Guard facilities are located on and adjacent to the airstrip at Annette, is that correct? A. That is correct.

Q. Do you know whether or not the Coast Guard at Annette dispatched equipment and personnel

(Testimony of Dudley S. Cox.)

after they were alerted to Sandspit to assist in rescue operations at Sandspit?

A. Not immediately, sir.

Q. Do you recall how long it took them to institute action?

A. It was some time. I can't state precisely.

Mr. Riley. At this time I direct the Court's attention to the last entry on page 1 of Plaintiffs' Exhibit 38, an entry at 0316 Pacific Standard Time.

The Court: I have it.

Q. I would like to read this to the witness: "Ann advised 404 that they have boats with outboard motors that they could put on them to take to ZP. This was in case the crash boat that was supposed to be heading to the scene would take too much time to get there."

As you understand that transmission, Mr. Cox, did the Coast Guard fly additional equipment to Sandspit from Annette?

A. Did they fly additional equipment? I can't recall that they did. I can't recall that particular point.

Q. Does that transmission indicate to you that they would [788] have or that they were?

A. That there was some boats and outboard motors at Annette which could be transported, and it is my personal recollection that there was a non-sched C-46 in that vicinity which they would use to do that job, and I don't recall now——

Q. Did they dispatch a crash boat from Annette to Sandspit?

(Testimony of Dudley S. Cox.)

A. There was a Coast Guard cutter stationed at Ketchikan. It wasn't what we refer to as a crash boat. It was a cutter, I believe, and they did not dispatch that boat at that time.

Q. Do you know why they did not?

A. No, sir, I couldn't say.

Q. How long would it have taken the crash boat or cutter to have reached Sandspit from Annette Island had it been dispatched, under ordinary conditions?

A. From Ketchikan, about eight hours, I'd guess.

Q. Where is Ketchikan in relation to Annette?

A. It is about twenty miles north of Annette.

Q. Referring to Plaintiffs' Exhibit 33, I will ask you if you can read from that exhibit Civil Air Regulation 41.127 as shown by that document to have been in effect on January 19, 1952.

A. That is 41.127, use of emergency equipment. "The emergency equipment required by 41.23 must be periodically inspected and tested in accordance with specifications [789] issued by the administrator. The crew of aircraft used in overwater flights shall be drilled periodically in 'abandon ship' procedures. Passengers shall be acquainted with the location of emergency exits, with emergency equipment provided for individual use, and with the procedure to be followed in the case of an emergency landing on the water."

Q. Mr. Cox, as manager of flight operations for Northwest in January, and specifically on January

(Testimony of Dudley S. Cox.)

19, 1952, what is your understanding of that section of the Civil Air Regulations which you have just read as to the duty of the airline, and Northwest Airlines in particular, to have briefed the passengers on Flight 324 of January 19, 1952?

A. Well, sir, may I inquire with reference—with reference to commercial passengers, I understand our duty as put forth in this regulation. It is to not only drill the members of the crew and to give them periodic instruction, but also to brief the passengers in the location of emergency gear and how to use that emergency gear with respect to life rafts, life vests, and the location of the life rafts.

Q. Yesterday you referred to the contract with the Air Force and Northwest Airlines and made reference to the term “briefing.” Ordinarily, with reference to the crews of a ship, and at this time in January, 1952, what does a [790] pilot or an air crewman or an airline representative consider the term “briefing,” with no other qualification, to mean?

A. As an air crewman, briefing is simply for the relating of something to someone else that is pertinent to whatever you are talking about.

Q. In these flights, these transpacific flights wherein refueling was accomplished at military installations, did the crews receive briefing from Air Force or armed forces personnel with respect to weather and conditions of flight en route and condi-

(Testimony of Dudley S. Cox.)

tions of fields and facilities en route to the point of destination?

A. Principally with respect to weather.

Q. Was Northwest Airlines provided with such a service at Haneda in Japan in January, 1952?

A. The service was there and available if we desired it.

Q. Did Northwest Airlines have its own briefing facilities? A. Yes, sir.

Q. Was this true at Shemya? A. Yes, sir.

Q. Was the information acquired from the military, armed forces, at both of those installations?

A. It was provided by means of Northwest-operated radio, I believe, and the military radio, and the intercept the listening watch that was maintained on Russian stations by [791] the military for the purpose of drawing weather maps, and also over all circuits that were available, I should say.

Q. Was that true in Anchorage?

A. Yes, sir, that was true in Anchorage also.

Q. Would there be a difference between passenger briefing and crew briefing?

A. With respect to emergency drills or weather briefing?

Q. Weather briefing.

A. Yes, sir, there would be a great deal of difference.

Q. Referring to Plaintiffs' Exhibit 21, will you refer to page 3 and read your statement concerning the company policy for engine out operation in

(Testimony of Dudley S. Cox.)

January 19, 1952, at the time of the crash of Flight 324 at Sandspit, British Columbia?

A. "Company Policy for Engine-Out Operation. 1. The Captain and Flight Superintendent shall collaborate and determine what is the nearest suitable airport taking into consideration such factors as: a. Nature of the malfunctioning and the possible mechanical difficulties that may be encountered if flight is continued including failure of other engines.

b. Altitude, aircraft weight and usable fuel at time of stoppage.

c. Weather conditions and terrain en route and at possible landing points. [792]

d. Air traffic congestion en route and at various available airports.

e. Pilot's familiarity with the airport and surrounding terrain.

f. Nature of failure insofar as related to airport safety facilities such as crash and fire-fighting equipment.

2. Upon reaching an agreement with the Captain as to which is the nearest suitable airport, the Flight Superintendent shall clear the flight to that airport. Note: In the event two airports are considered suitable and as safe, clearance shall be made to the nearest in point of time.

3. If after arrival over the nearest suitable airport to which cleared, the Captain decides to continue, such continuation must be made under his emergency authority, the exercise of which shall

(Testimony of Dudley S. Cox.)

be predicated on safety reasons only. No continuation shall be predicated——”

The Court: What is the use of reading everything? Do you want everything read?

Mr. Riley: That is sufficient, your Honor.

The Court: We do not have time enough to read everything.

Mr. Riley: That portion is sufficient. That concludes my cross examination of Mr. Cox.

The Court: Is there any redirect? Try to have in mind the passage of time. [793]

Mr. Koch: Your Honor, am I correct in assuming that the hypothetical question and the answers are stricken, inasmuch as Mr. Riley did not pursue them?

The Court: I do not know what you have in mind. The record will show the Court's ruling. If it is absolutely indispensable to your further interrogation that you be reminded exactly what took place, I will have it read, if you will tell me what place it was in the record.

Mr. Koch: The Court did not make a ruling. The Court advised Mr. Riley he would have to ask more questions and——

The Court: I suggested one way on cross examination to have identified and properly lay the foundation for admission in evidence of an exhibit not previously admitted as part of plaintiffs' case in chief.

Mr. Koch: That is not what I have reference to, your Honor. Previously there was a hypothetical

(Testimony of Dudley S. Cox.)

question that stated as follows: assuming a visibility of one mile——

The Court: I ask you to proceed with the questioning of this witness, if you wish to ask him anything on redirect examination.

Redirect Examination

Q. (By Mr. Koch): Mr. Cox, on cross examination yesterday reference was again made to pre-flight check, do you recall that? A. Yes, sir.

Q. Can you tell me how many inspections are made before an airplane on a MATS overwater flight from Seattle to Tokyo departs?

Mr. Riley: This question is very leading. I object.

The Court: The objection is overruled. This is redirect. He is entitled to be summarizing the questions to a fair extent.

A. There are three such inspections made before the aircraft departs from Seattle.

Q. What are the three?

A. Well, the mechanic who puts the equipment on board and signs a pre-flight inspection; the inspector who inspects the equipment and certifies——

Q. When you say equipment, you are referring to what equipment?

A. Emergency equipment, the life rafts, life vests, etc. Then the inspector who certifies on his checklist and signs his name that the equipment is there and in place; and following that, the aircraft is delivered to the ramp and the flight crew inspect

(Testimony of Dudley S. Cox.)

the aircraft with respect to this emergency equipment and assure themselves that it is there. If it isn't there, the aircraft can't depart until it is there. [795]

The Court: Defendant may have five more minutes to inquire of this witness.

Q. With respect to the pre-flight inspection which is introduced as an exhibit, there was an inspection from Seattle called a pre-flight inspection which was admitted in evidence, and also one from Elmendorf? A. Yes.

Q. Which one of those three checks is that one, do you know? A. That is by the mechanic.

Q. That is the mechanic's check?

A. Yes, sir.

Q. Is that a part of the inspection department?

A. No, sir, that is not part of the inspection department.

Q. What is the check that is made following that? That is the check by the crew?

A. After the airplane is delivered on the ramp. Before that, after the mechanic signs the airplane off, in connection with that at that time there are two people that inspect it. The inspection department certifies that the equipment is there. Then the aircraft is delivered to the ramp and the flight crews board the airplane and examine the airplane to see that this equipment is on board and is in proper quantities and numbers.

Q. Does the airline require the crew to make such inspection? A. Yes, sir. [796]

(Testimony of Dudley S. Cox.)

Q. Would it have been possible at the time this plane went in the water for the life rafts to have been launched before the passengers got out of the plane?

A. I couldn't answer that. It may have been possible, sir. There is undoubtedly confusion and wreckage and seats torn loose and things of that nature, darkness, and scrambling around, opening emergency exits. There was undoubtedly that confusion, plus the fact that the water was coming in the aircraft. I couldn't really state positively that it was a possibility or probability.

Q. Do you know whether or not an attempt was made to launch the life rafts?

A. Yes, sir, we know.

Mr. Riley: Objection.

The Court: Answer yes or no.

A. Yes, sir.

Q. What do you base your answer upon?

A. The fact that one life raft was protruding from the astrodome of the aircraft, the top of the fuselage, and could be seen as we passed over the airplane in a boat in the water, could see the raft and was easily identified, plus the fact that one of the survivors at McChord General Hospital stated——

Mr. Riley: Objection. Now we are getting into hearsay, your Honor. [797]

The Court: You cannot say what he said.

Q. Were any of the twenty-man life rafts recovered? A. Yes, sir.

(Testimony of Dudley S. Cox.)

Q. Where? A. On the beach at Sandspit.

Q. Do you know whether or not they were inflated to determine whether they were in working order?

A. One was taken to St. Paul and inflated in the normal manner of inflation, and it proved usable in every respect.

Q. Does Civil Air Regulation 41, that is Plaintiffs' Exhibit 33 that you have before you, require the pilot to notify the passengers of a three engine operation prior to the time an actual emergency is declared?

A. No, sir, I don't think there is any such requirement.

Q. Does it impose any duties upon the crew with respect to the passengers before an emergency is declared?

The Court: To your knowledge.

A. No, sir, none to my knowledge.

Q. Is the declaration of an actual emergency discretionary with the pilot? A. Yes, sir, it is.

Q. Is the declaration of a potential emergency discretionary with the pilot?

A. Well, yes, sir. That is obvious, it has to be.

Q. If the engine ceases to function and is feathered, does [798] a potential emergency exist?

The Court: Do you believe that you have not asked him on this subject before in your direct?

Mr. Koch: I was afraid it had been——

The Court: It has been gone over so many times

(Testimony of Dudley S. Cox.)

that it is very easy for me to be convinced that it has been done with this witness.

Mr. Riley: It has been covered, Your Honor, I think both on direct and redirect.

The Court: The Court asks counsel to ask a different question.

Q. Will you turn again to Part——

The Court: At this time the examination by the defendant of this witness is terminated. We will have about a ten minute recess.

(Recess)

The Court: Does the plaintiff wish to ask anything vital of this witness?

Mr. Riley: No, Your Honor.

Mr. Koch: I wonder if I might have leave of the Court to finish the one I was asking.

The Court: Will you ask literally one question?

Mr. Koch: Just one question.

Q. (By Mr. Koch): Will you refer to Plaintiffs' Exhibit 33 and Section 41.127 with reference to the duties of the [799] crew to the passengers with respect to emergency equipment? In your interpretation of that section, is the life raft to be considered individual equipment for the use of passengers? A. No, sir.

Mr. Koch: That is all.

The Court: Is there anything further?

Recross Examination

Q. (By Mr. Riley): With respect to that sec-

(Testimony of Dudley S. Cox.)

tion, Mr. Cox, a life raft is emergency equipment, is it not? A. Yes, sir.

Q. And doesn't Section 41.127 say that, "Passengers shall be acquainted with the location of emergency exits, with emergency equipment provided for individual use, and with the procedure to be followed in the case of an emergency landing on the water."?

A. That is what it states, yes, sir.

Mr. Riley: That is all I have.

The Court: You may step down. Call defendant's next witness.

(The witness was excused.)

Mr. Koch: Your Honor, at this time I would like to read the deposition of Richard Fields.

Mr. Riley: I have never had a copy of the [800] deposition of Mr. Fields, but I will be glad to—I don't know what arrangements you want to make with reference to it. I can read the Court's copy, I presume. There are only two copies in court.

The Court: Every Court should, and this Court will sooner or later strike and suppress a deposition in a civil case because counsel at whose request the deposition was taken did not provide the opposing counsel a copy and an extra copy for use by the Trial Judge during the time the deposition is being offered in evidence. You may proceed.

Mr. Koch: This deposition was taken in Los Angeles. I had no part in it except to ask——

The Court: Did you ask someone in Los Angeles to represent you in the taking of it?

Mr. Koch: Yes, Your Honor.

The Court: It was taken at your client's request?

Mr. Koch: Yes, Your Honor.

The Court: Then the statement that the Court has just made applies to your client and his attorney. You may proceed.

Mr. Riley: I would like to state I am not objecting to this deposition, because I think it is of assistance to the plaintiffs' case.

The Court: That is not a good habit to form, to make [801] statements like that in the course of trial procedure. It is not a reason for receiving or excluding a deposition, so I would not get in the habit of making statements like that.

Mr. Riley: I will ask that it be disregarded.

The Court: It will be. I was mentioning it more because of future situations.

Mr. Koch: Starting page 3, line 8:

(reading deposition)

At line 4, page 4:

Mr. Koch: I think we can skip this preliminary portion.

Mr. Riley: I suggest you strike the whole of page 5. It is just repetition by counsel.

The Court: Turning to what, please?

Mr. Koch: Page 6, line 2, Your Honor:

(reading deposition)

At line 25, page 8:

Mr. Riley: I object to this question on the ground it is leading, if the Court please.

The Court: The objection is overruled.

Reading of deposition resumed at line 26, page 8:
(reading deposition)

At line 2, page 15:

Mr. Koch: Skipping to line 24: [802]

Mr. Riley: If the Court please, because I would go back and put this in, I think we might as well finish this page.

The Court: He is not required to take his time for that. He has the privilege of omitting any part of it he wishes.

Mr. Koch: Beginning at line 18, page 15:
(reading deposition)

At line 12, page 16:

Mr. Koch: Skipping to line 26, page 16:
(reading deposition)

At line 24, page 17:

Mr. Riley: I object to the question. It is leading. The bulk of ours was excluded.

(After further argument on the objection, the objection was withdrawn by Mr. Riley.)

The Court: Proceed. The objection stated is withdrawn.

Mr. Koch: I will withdraw that question.

The Court: You may do that. Withdraw the answer, likewise.

Mr. Koch: Page 18, line 13:
(reading deposition)

At line 5, page 19:

Mr. Koch: I believe that is all that is relevant.

The Court: This deposition is received as part of defendant's case in chief with like effect [803]

as if the witness in question had been present and orally testified from the witness stand as is stated in the deposition.

Mr. Riley: In effect as cross examination, may I read those portions of the exhibit which were excluded?

The Court: You may read any part of the deposition desired by the plaintiffs not already read.

Mr. Riley: I refer the Court to page 15, line 3:
(reading deposition)

At line 15, page 15:

Mr. Riley: Turning to page 16, line 13:
(reading deposition)

At line 17, page 16:

Mr. Koch: "The water was cold enough to create a numbness in my limbs immediately afterwards." The remainder of that answer, after the first sentence, I object to as hearsay, a hearsay reply.

Mr. Riley: Counsel took this examination and——

The Court: He is not offering it, however, and the objection is sustained.

Mr. Riley: Page 16, line 20:
(reading deposition)

At line 25, page 16:

The Court: Do counsel agree that the "32" in the answer refers to 32 degrees above zero?

Mr. Riley: Yes, Your Honor. [804]

Mr. Koch: I assume so, Your Honor.

Mr. Riley: Page 17, line 23:
(reading deposition)

At line 24, page 17:

Mr. Koch: I object to the question on the ground that the Court has already ruled that such testimony——

The Court: I am inclined to that view. Why is that not true?

Mr. Riley: Because he has been permitted on direct examination to point out that he has not had any condition from a date a year subsequent to the accident.

The Court: Where is that said?

Mr. Riley: Line 13, page 18, "Starting from the period January 1, 1953, up to this date——"

The Court: Where is this question that is now objected to?

Mr. Riley: This question commences page 17, line 23.

The Court: The objection is overruled.

Mr. Koch: Your Honor, he did not object to the question I asked, but I am objecting to the question he has asked. The question I asked related only to absence of further difficulty, but not to the nature of the difficulties previously excluded by the Court in prior testimony.

The Court: The objection is overruled. [805]

Reading of deposition resumed at line 23, page 17:

At line 24, page 17:

The Court: You are asking how long, not what it was? At line 26, he speaks of the time.

Mr. Koch: I would object again, Your Honor, because his answer is not responsive. It says how

long was it before he was completely free, and the answer appears at line 13, page 18. Everything between it and there describes the difficulties which he had and is not responsive to the question asked.

The Court: The objection is overruled. The answer beginning at line 25, page 17, may be read.

Reading of deposition resumed at line 25, page 17:

(reading deposition)

At line 2, page 18:

Mr. Riley: I don't care to offer any more of it.

Mr. Koch: I will put in the rest of it, Your Honor, the top of page 18, line 3:

The Court: You may do that.

Reading of deposition resumed at line 3, page 18:

(reading deposition)

At line 12, page 18:

Mr. Koch: That is all, Your Honor.

The Court: All this deposition that has been read is received in evidence in connection with the reception [806] of evidence in the defendant's case in chief.

Mr. Koch: Now, I would like an opportunity to put into the record those portions of the testimony of Lt. Baker which were excluded by Mr. Riley when he used the deposition.

The Court: You may do that. The deposition of Donald E. Baker is now receiving attention. You may proceed, as to those parts not previously read in evidence as a part of the plaintiffs' case in chief.

Mr. Koch: Commencing at page 8, line 25:

(reading deposition)

At line 20, page 9:

Mr. Koch: Skipping now to page 14, line 19:

(reading deposition)

At line 17, page 15:

Mr. Riley: I will withdraw the objection at line 23.

The Court: Proceed. Are counsel able to agree in what capacity this witness, Mr. Baker, served this flight, if he did serve it?

Mr. Koch: He was a passenger, Your Honor. Isn't that true, Mr. Riley?

Mr. Riley: That is true.

Mr. Koch: Skipping down to line 8, page 16:

(reading deposition)

At line 12, page 18: [807]

Mr. Riley: That part of the testimony has already been covered.

The Court: I am sure it was an inadvertence. You may proceed.

Mr. Koch: If so, it was in error.

The Court: May I suggest to you, Mr. Riley, that the Court had marked on the Court's copy that the reading by the plaintiff stopped with the word "shield" on line 12 and that thereafter on that page it was not read.

Reading of deposition resumed at line 13, page 18:

(reading deposition)

At line 22, page 19:

Mr. Koch: Skipping to line 25:

(reading deposition)

At line 5, page 20:

Mr. Koch: Line 21, page 20:

(reading deposition)

At line 25, page 20:

Mr. Koch: Skipping to line 8, page 21:

(reading deposition)

At line 17, page 21:

Mr. Koch: We have covered this already. Excuse me. Page 22, line 21, is it not?

(reading deposition)

At line 25, page 22: [808]

Mr. Riley: This is a part that has been read.

The Court: The reading at this point continued down to line 6, page 23, at which place, down to line 20, there was an omission. You may recall the reason stated for the omission. The reading resumed and continued down to line 24 on page 24.

Mr. Koch: Line 12, Your Honor.

Mr. Riley: I believe it is line 12, page 24.

Reading of deposition resumed at line 13, page 24:

(reading deposition)

At line 11, page 25:

Mr. Koch: Line 12, page 26:

(reading deposition)

At line 20, page 28:

Mr. Riley: I object to the question, being leading.

The Court: Who took the deposition?

Mr. Riley: This is my part of the direct examination, Your Honor.

The Court: The objection is overruled, if you

ask the question, or if Mr. Koch did, because, as I understand it, you are the one who asked the question and no objection was made, and Mr. Koch has a right to read it.

Mr. Koch: I am going to read the question and then skip the intervening material, the colloquy.

The Court: You may do so. [809]

Reading of deposition resumed at line 19, page 28:
(reading deposition)

At line 14, page 29:

Mr. Riley: The answer is at line 20.

Reading of deposition resumed at line 20, page 29:
(reading deposition)

At line 6, page 31:

Mr. Koch: Skipping to line 18, page 35:
(reading deposition)

At line 7, page 36:

Mr. Koch: Page 38, line 3:

At line 6, page 39:

The Court: Do counsel agree as to what village that refers to? Is it Sandspit or some other village?

Mr. Riley: I am sure it is Sandspit, Your Honor.

Mr. Koch: I would imagine so, too, Your Honor. That is all. The cross examination was substantially covered, as I recall, Your Honor.

Mr. Riley: I have nothing further, Your Honor.

The Court: This part of the deposition will be received as part of defendant's case in chief. We will take the noon recess until 1:30 o'clock.

(Recess)

The Court: You may proceed.

(Dr. Alfred Sheridan was called as a witness by [810] defendant, was sworn, and testified.)

(Argument between counsel re calling of Dr. Ruuska and Dr. Crystal by defendant, and offer of proof by Mr. Koch. The privilege of inquiring of Dr. Ruuska and Dr. Crystal as defendant's witnesses in respect to the matters and things stated in the offer of proof was denied.)

(Further argument re certain exhibits which were excluded from evidence relating to the history and training of co-pilot Kuhn and stewardess Cheadle.)

The Court: The Court sustains the objection as formerly, and I wish you to understand that completes the Court's action upon that type of offer. You may proceed.

GENE KINGSTON

called as a witness by the defendant, was sworn and testified as follows:

Direct Examination

Q. (By Mr. Koch): Will you state your name, please? A. Gene Kingston.

Q. What is your address?

A. 17835 May Creek Road, Renton, Washington. [811]

Q. What is your present employment?

A. I am employed as an Air Traffic Controller at Renton, Washington.

(Testimony of Gene Kingston.)

The Court: Who pays your salary, if anybody does?

The Witness: The City of Renton.

Q. You are stationed at the Renton Airport, are you not? A. Yes, sir, that is correct.

Q. Do you have a pilot's license, too?

A. Yes, sir, I do.

Q. What type of license?

A. Commercial license with ratings, single and multi-engine, land and sea, flight instructor, instrument.

Q. What was your occupation on January 19, 1952?

A. Air Traffic Controller with the CAA at Annette Island, Alaska.

Q. What were the duties of your position?

A. To control and expedite all air traffic within the area that is assigned to Annette Island. That would be en route traffic going from one station to another and through our area, and also traffic landing and departing from Annette Island.

The Court: For whom did you say you were working then?

The Witness: At present?

The Court: No, then.

The Witness: The Civil Aeronautics Administration. [812]

The Court: When were you there so employed at that island? Give the limits of it, if you can. What

(Testimony of Gene Kingston.)

days in the month of January, 1952, were you there employed?

The Witness: All of January.

Q. Were you on duty the night of January 19, 1952? A. Yes, sir, I was.

Q. As Air Traffic Controller of Annette Island?

A. Yes, sir.

Q. Are you familiar with the accident to Northwest Airlines Flight 324 of the 17th which that night crashed off the coast of British Columbia near Sandspit? A. Yes, sir, I am.

Q. Were you in contact with that flight during the course of its trip from Anchorage south?

A. Yes, sir.

Q. Did that flight contact the Annette radio station? A. Yes, sir.

Q. Do you recall when it did so?

A. I couldn't give you the exact minute. I can tell you the position of the flight.

Q. Where was the flight when you first heard from it? A. Southwest leg of Sitka.

The Court: May I have that answer?

The Witness: That was by the southwest leg of Sitka radio range, Your Honor. [813]

Q. What do you mean by the southwest leg of the Sitka radio range?

A. That is a position that the aircraft reports immediately after entering the control area assigned to Annette Air Route Traffic Control, and it is a geographical position approximately thirty or forty miles southwest of Sitka, Alaska.

(Testimony of Gene Kingston.)

The Court: Where is Sitka with respect to the trip from Annette Island to Sandspit or Anchorage or any other two termini?

The Witness: Sitka is a direct line from Anchorage to Sandspit. Annette Island is approximately fifty miles east of that line, approximately fifty miles south of that line. Does that make it more clear?

The Court: Yes, only I do not understand where the two or three are in relation to each other.

The Witness: Sitka——

The Court: May I interrupt you to ask this: do you have in mind what you were doing and what the time was, approximately, when you last heard from or were in contact with the airplane on Flight 324 which crashed at Sandspit, British Columbia, in the early morning hours of January 19, 1952? If so, state yes or no.

The Witness: Yes.

The Court: Where was that plane when you last [814] identified its position before it actually crashed on Sandspit runway?

The Witness: Over Sandspit, starting its initial approach to landing.

The Court: You may inquire.

Q. Handing you what has been marked Defendant's Exhibit A-5, which is a list of messages reported in what is the flight position log, will you read the first message that you received at Annette Island from Flight 324?

A. "Northwest Airlines Flight 324 southwest

(Testimony of Gene Kingston.)

Gustavus at 0737 Greenwich, cruising 8,000 feet, estimating Sitka at 0757 Greenwich time."

Q. What time in Pacific Standard Time is that?

Mr. Riley: You are referring to the time of transmission or the estimated over Sitka? I felt that should be clarified, your Honor.

The Court: That is sufficient. Did you address your question to the witness? You should not do that.

Mr. Riley: I didn't intend to. I was actually directing it to counsel.

The Court: Address all statements and objections to the Court.

Mr. Riley: Yes, your Honor. There are two times there. I wanted it to be clear which time.

The Court: Is it convenient for counsel inquiring to [815] bring that out?

Mr. Koch: Yes, your Honor.

The Court: Will you do so now?

Q. That one message you read and the time you gave is the time of transmission or time of receipt?

A. That was the time that the aircraft reported over those positions, and that is Greenwich time. You arrive at Pacific Standard Time by subtracting eight hours.

Q. Making that subtraction, what time would it be?

A. That would be 11:02 P.M., or 2302 Pacific.

Q. Was the flight in the Annette radio range at that time?

A. Would you state that question again?

(Testimony of Gene Kingston.)

Q. Was the flight in the Annette radio range at that time? Was it being controlled by Annette?

A. No, sir, it wasn't at that time. It would be controlled by us a very few minutes afterwards.

Q. Do you find a message in that exhibit that was received at Annette Island advising that the No. 1 engine had been feathered?

A. Yes, sir.

Q. What time was that?

A. 0838 Greenwich. That would be 0038 Pacific. Do you want these times in Greenwich or Pacific?

Q. Greenwich is acceptable. Were there communications between the Annette station and the flight that are not recorded [816] on the exhibit before you?

A. Yes, sir, there were.

Q. Do you recall the contact from the flight to you relative to weather conditions at Annette?

A. Yes, I do.

Q. Will you relate the contents of such message, and your response?

A. Do you want me to read it from the record?

Q. I don't know if it is on that exhibit.

A. There were several discussions about the weather. Part of it is on here; part of it isn't.

Q. You can recite it without reference to that exhibit, if you will.

Mr. Riley: I will object. He can state what he said, but I certainly object to anything they assert the aircraft said, which is not a matter of record, because we are getting into transmissions from the

(Testimony of Gene Kingston.)

aircraft which we cannot cross examine as to the source or content.

Mr. Koch: He can state what messages he received. It is the fact of the reception of the message, not the contents of the message that is important. I am not offering it for the truth of what the message contained, but to show receipt of the message, and there was a conversation in which information was requested and information was submitted, and it is in the very same nature as the [817] messages which have been received in evidence. It just isn't written down on paper that is in this courtroom.

The Court: Do counsel have any authority on this?

Mr. Koch: It is my understanding that the authorities are uniform that where you are not offering it for the truth of the matter contained——

The Court: I have some kind of understanding about it myself, but I wondered if you had any authority you wished to use to influence the Court's thinking upon the subject. I would be glad to have it. If you have not, we will consider it without authorities the best we can.

Mr. Riley: I am sorry, your Honor. I am not prepared in advance on this question.

The Court: The Court overrules the objection and advises counsel that the only purpose for which the Court will consider the evidence is concerning the fact that a message was sent, and not in any way as to what was said in the message so far as the truth of the statement is concerned.

(Testimony of Gene Kingston.)

Mr. Koch: That is the purpose for which it is offered, only.

The Court: I think the better plan would be to frame the question so it would not be asking for the words of the message sender, but merely asking for an indication by him regarding a message seeking information about landing [818] or a message stating information about landing.

Mr. Koch: I will strike the last question.

Q. Did you receive a message from the flight when it was in the general area of Sitka requesting landing information? A. Yes, sir.

Q. What message did you give the flight in response to that request?

The Court: Would it not be more appropriate to say, "Did you give a message intending to assist him in that operation?", or something to that effect?

Q. Did you give a message in response to that inquiry attempting to assist the flight in regard to the respect inquired of? A. Yes, sir.

Q. What was the message which you gave?

The Court: The Court's intention was to avoid saying what he said.

Mr. Koch: This witness can say what he said, can he not?

The Court: Proceed.

A. I gave Northwest Flight 324 Annette Island weather, Sandspit weather, Port Hardy weather.

Q. Do you recall what Annette weather was at that time?

(Testimony of Gene Kingston.)

The Court: As to whether it was closing-in or open weather. [819]

A. The weather at that time was below landing minimums.

The Court: By that, what do you mean? It was such condition as to make not recommended a landing attempt, or does it mean something else?

Mr. Riley: I think that answer should be stricken and he should be required to state what the weather was. The weather is a matter of record already, in documents already in evidence. I think he should state what the weather was, without his conclusions.

Mr. Koch: That wasn't the message he gave.

The Court: The objection is overruled. Read the question.

(Last question read by reporter.)

A. I recall that the——

The Court: You should say yes or no. Then ask him another question.

A. Yes.

Q. Do you recall whether the Annette Field was open or weathered in?

Mr. Riley: I object. He should state what the weather is, rather than referring to general terms which are, in effect, conclusions.

The Court: The objection is overruled. Answer yes or no.

The Witness: May I have the question again?

(Last question read by reporter.)

A. Yes.

(Testimony of Gene Kingston.)

Q. What was the condition?

A. Weathered in.

Q. Did you advise the flight of that fact?

A. Yes, sir.

The Court: Now, will you advise the Court what you meant by the expression "weathered in", so far as the movement of airplanes to and from the landing strip is concerned?

The Witness: Your Honor, we are furnished with——

The Court: What did it indicate as to the kind of weather that existed on that landing strip as the same was related to the advisability of landing an aircraft there?

The Witness: It was not advisable to land at that time, due to the weather that existed.

Q. Did the Annette radio center have instructions as to what the minimums permitted by the various air carriers were, weather minimums for landing at Annette? Did you have that information there at that time?

A. You will have to state that question again, sir.

Q. Did the CAA radio office at Annette Island where you were located have a record of what the landing minimums were for the various airlines that might use the Annette facilities? [821]

A. Yes, sir.

Q. Did you have such a record of landing and weather minimums for Northwest Airlines?

A. I don't remember.

(Testimony of Gene Kingston.)

Q. Do you know whether or not the weather at Annette Island that night was within the minimums of any airlines whose records you had at Annette?

A. Yes, sir.

Q. What is the answer? A. No.

Q. "No" meaning——

A. They were not within the minimums.

The Court: At what place does that last answer refer to?

The Witness: At Annette Island.

Q. Was the weather below Civil Aeronautics Administration minimums? A. Yes, sir.

The Court: That was at Annette Island, or somewhere else?

The Witness: Yes, your Honor, at Annette Island.

The Court: Do you know in the region round-about Annette what the weather was with respect to landing on the airstrips that were available?

The Witness: Yes, your Honor. [822]

The Court: What was it, if you know, those that were noted by you?

The Witness: Sandspit, I remember the weather.

The Court: You said it was weathered in, as I understand it.

The Witness: Not at Sandspit.

The Court: Where was it?

The Witness: Annette Island only. That is the only place I remember.

(Testimony of Gene Kingston.)

The Court: What was the condition at Sandspit, if you know?

The Witness: 2,500 overcast ceiling, to the best of my memory.

The Court: What does that do with respect to permitting, facilitating or impeding the landing of an airplane at that moment?

The Witness: That wouldn't impede an aircraft.

The Court: You may proceed.

Q. Did you convey that information with respect to Sandspit weather to the flight?

A. Yes, sir.

Q. Did the flight request authority or clearance from your station to go into another control area?

A. Yes, sir.

Q. Was such clearance given? [823]

A. Yes, sir.

Q. To where? A. To Sandspit.

Q. Do you know whether or not the flight contacted the Vancouver control area?

A. Yes, sir.

Q. Did it? A. Yes, sir.

Q. Did you hear the conversation between the flight and the Vancouver control area?

A. Yes, sir.

Q. Did or did not the flight receive clearance from the Vancouver control station to proceed to Annette to land?

Mr. Riley: I object to that.

Mr. Koch: To Sandspit to land, I beg your pardon.

(Testimony of Gene Kingston.)

Mr. Riley: I object to that. He is quoting again from hearsay.

The Court: That objection is sustained.

The Witness: Yes, sir.

The Court: Strike the answer. The Court sustained the objection to that question.

Q. Did you hear a conversation between Vancouver control area and the flight relative to proceeding for a landing to Sandspit?

A. Yes, sir. [824]

Q. Did you receive a message that also went to the flight, clearing the flight to Sandspit?

A. Yes, sir.

Q. Did you receive a message that also went to the flight from Sandspit relative to the plane landing at Sandspit?

The Court: A message from whom? Will you insert that?

Q. From Sandspit.

The Court: Sandspit control station?

Q. Sandspit radio station.

The Court: Read the question with that insertion.

(Question read by reporter as follows:

Q. Did you receive a message that also went to the flight from Sandspit radio station relative to the plane landing at Sandspit?)

A. Yes, sir.

Q. Was the flight to Sandspit authorized at a specific altitude? A. Yes, sir.

Q. Will you examine the exhibit before you,

(Testimony of Gene Kingston.)

A-5, and read the messages that appear on that exhibit which you received or overheard?

A. Message from CAA Yakutat at 0828 Greenwich advises No. 1 engine feathered, proceeding Sandspit, Captain, Northwest Airlines Flight 324.

Advise if landing at Sandspit or proceeding to Seattle. Seattle weather okay. [825]

Q. Have you finished?

A. No, sir, there is quite a number.

Northwest Flight 324, oil cooler No. 1 engine broken, proceeding to Sandspit.

The Court: What was it that broke?

The Witness: The oil cooler on the No. 1 engine.

A. Northwest Airlines Flight 324 southwest Annette 0859 Greenwich, 8,000, estimating over Sandspit 0928 Greenwich.

Q. The rest of them after the accident.

A. Yes, sir.

Q. That is sufficient, then. Did the Annette station direct a NOTAM, a notice to airmen, to Flight 324?

A. Yes, sir.

Q. What did that NOTAM contain?

Mr. Riley: I will object to that unless the witness wants to testify that he did it. It would be hearsay, otherwise.

Q. Did it happen in the vicinity of where you did your work?

A. Yes, sir.

Q. From the same station?

A. The same radio frequency.

Mr. Koch: I think the question is proper, your Honor.

(Testimony of Gene Kingston.)

Mr. Riley: He is talking about a statement that was made by a person other than himself, a message presumably made by a person other than himself to the captain of [826] Flight 324, and it is that I am objecting to. I feel if he made the statement or transmitted the message to the flight, it is all right, I can cross examine him as to it, but if someone else sent it and he is repeating what someone else said, I object to it.

Mr. Koch: They were working in the same place, same facility, and this witness is competent to testify as to what that office did.

The Court: The objection is overruled.

Q. Would you read the question, please?

(Last question read by reporter.)

A. It contained the weather at Sandspit.

Q. Did it contain anything about flare pot lighting of the Sandspit field? A. No, sir.

Q. Did it contain anything about snowbanks along the runways of the field?

Mr. Riley: This is leading the witness.

The Court: The objection is overruled.

A. No, sir.

The Court: Do you recall anything else about any mention of any flight restrictions, any aspects of flight restriction not already mentioned by you?

The Witness: No, your Honor.

Q. Do you recall whether or not it dealt with the braking [827] conditions on the runway?

A. I'm not sure, sir.

(Testimony of Gene Kingston.)

Q. Will you read message K on that exhibit, A-18, top of page two?

Mr. Riley: I will have to object. He is showing the witness the report, accident report of Mr. Smith to Mr. Cox, of which this witness—this report made by Mr. Smith to Mr. Cox, it is an interoffice communication in Northwest Airlines, and it reports a narrative of what happened on that morning; hasn't anything to do with what this witness was doing.

The Court: During whose testimony was Exhibit A-18 admitted?

Mr. Riley: During Mr. Smith's, isn't that right?

Mr. Koch: I don't know. I don't think so.

The Clerk: It was admitted April 9th.

Mr. Koch: Your Honor, it is in evidence. There is one line that contains the Sandspit weather at the time of the accident. I could have read it myself.

Mr. Riley: I will withdraw the objection. Why don't you refer to A-5?

Mr. Koch: I did.

The Court: Proceed.

Q. Will you read——

A. Weather condition at time of accident: Sandspit, 19th, [828] 0920 Greenwich, estimated, ceiling 2500 overcast, visibility 10 miles, temperature 34, dew point 30, wind south-southwest 10, pressure 29.44 inches.

Q. What was the last?

A. 29.44 inches. That is the station pressure in inches, in mercury.

Q. Was there any reference in that exhibit to

(Testimony of Gene Kingston.)

snow at that time? A. No, sir.

Q. Was there any reference to clouds at the 2500 foot level, or anything like that?

A. There is reference to breaks in the overcast.

Q. And 2500, what does that mean?

A. 2,500 foot ceiling. That means the base of the clouds are at 2,500 feet above the surface of the ground.

Q. In the event of an emergency, whose duty is it to alert Air and Sea Rescue facilities or notify the Coast Guard, take that kind of precaution?

A. Air Traffic Control.

Q. That is part of the Civil Aeronautics Administration? A. Yes, sir.

Q. Was an emergency declared by this flight?

A. I don't recall any emergency being declared. I only recall the fact that he reported an engine feathered and the No. 1 oil cooler inoperative or broken.

Q. Did you alert Air Sea Rescue facilities when you heard [829] of the accident?

A. Yes, sir, I did.

Q. What did your alerting of those facilities consist of?

A. We have a crash phone to the Coast Guard area. I picked up the phone and talked to the Coast Guard commander.

Q. What Air Sea Rescue facilities exist at the Coast Guard station at Annette, if you know?

A. Two Grumman Goose amphibious twin-engine airplanes; two eighteen-foot lifeboats.

(Testimony of Gene Kingston.)

Q. Is there any fire-fighting equipment?

A. No, sir.

Q. Is there a fire truck? A. No, sir.

Q. What distance do the rowboats, wherever they are stationed, have to traverse to get to the Annette Island runway?

A. Three and a half to four miles.

Q. Over what kind of terrain?

A. Gravel roads, over muskeg, swampy-type ground, small trees.

Q. Are these Air Sea Rescue facilities, consisting of two rowboats and two amphibian planes, operative at night? A. No, sir.

Q. Is it only daylight Air Sea Rescue service?

Mr. Riley: He is consistently leading the witness.

The Court: Avoid leading the witness. [830]

Q. Will you state when that Air Sea Rescue service is available?

The Court: With reference to time of day, or what?

Mr. Koch: Yes, your Honor.

A. Well, there is a little more to it than——

The Court: Couldn't you say yes or no, and if you don't know, just state that you don't know.

A. Apparently it is available only during the day.

Q. When you did notify the Air Sea Rescue facilities—did you not testify that you did alert them? A. Yes, sir, I did.

Q. Did they alert their facilities at night?

(Testimony of Gene Kingston.)

A. No, sir, they didn't.

Q. When did you contact the Coast Guard facilities?

A. Immediately upon learning that the aircraft in Flight 324 was in difficulty.

Q. When were the facilities alerted, if you know?

A. Within not more than a minute afterwards.

Q. Did the Coast Guard provide any Air Sea Rescue service?

A. No, sir, only to the extent of two rowboats some considerable time later.

Q. Did or did not the Coast Guard refuse to take their airplanes out at night?

A. They refused to do that.

Q. That night? [831] A. Yes, sir.

Q. Do you know whether or not a message from Seattle Flight Control sending weather information to the flight was delivered to the flight?

A. I know that the flight received weather. I couldn't say definitely whether this particular message went to the flight.

Mr. Koch: I have no further questions.

Cross Examination

Q. (By Mr. Riley): You didn't alert the Coast Guard until after the crash, until after you heard of the crash, did I understand your testimony correctly? A. Yes, sir.

Q. And there was no alert to them from the time that Flight 324 reported on the southwest course of

(Testimony of Gene Kingston.)

the Sitka range that it had feathered its engine, is that right? A. Yes, sir.

Q. Would you explain to the Court what we mean when we refer to the southwest course or southwest leg of the Sitka radio range?

A. That is a point where the aircraft passes through that radio beam. It is a geographical location. I don't recall exactly what the coordinates are. [832]

Mr. Riley: Could the witness see Exhibits 6 and A-5?

Q. Have you located the southwest course of the Sitka radio range on the map before you?

A. Yes, sir.

Q. Is that the position at which Northwest Airlines inquired of the Annette weather and at which you relayed the Annette weather, as near as you can tell?

A. Yes, sir, as near as I can tell.

Q. Did Flight 324, after reporting to you that it had feathered its No. 1 engine on the southwest course of the Sitka radio range and was proceeding to Sandspit, did they request any further weather information at Annette after that time?

A. Yes, sir. They asked me if there had been any change in the weather, if it looked like it was going to continue the same.

Q. Would you refer now to Exhibit A-5 before you? I will ask you to refer to the last message commencing on the bottom of page 1 of Exhibit A-5, and ask you did you transmit that message to

(Testimony of Gene Kingston.)

Northwest Airlines Flight 324 on the morning of January 19, 1952?

Mr. Koch: I wonder if the message could be read. I don't know what it is.

Mr. Riley: I will ask him to read it if he states he transmitted it. [833]

Q. Did you transmit that message?

A. No, sir.

Q. Do you know from looking at this flight position log who did transmit it?

A. Annette Island transmitted the weather.

Q. Were you the only radio operator on duty at this time? A. No.

Q. Would you state what the transmission commencing at the bottom of page 1 is? Read it, interpret it, beginning on page 1 and continuing to the top of page 2.

Mr. Koch: Your Honor, the witness just said he didn't send it. The message itself will speak for itself. When he says "No", he still asks him to read it.

The Court: The objection is overruled.

A. Sandspit broken to overcast, occasionally light overcast, one mile, light snow.

Q. That transmission is continued, isn't it? Would you read the entire message as it is set forth? A. Port Hardy—

Q. Commencing the last message, including the heading, bottom of page 1.

A. Annette—I can't quite make out this other part—to Northwest Flight 324-17, terminal forecast

(Testimony of Gene Kingston.)

your arrival time. Sandspit broken to overcast, occasionally light overcast, visibility one mile, light snow. Continued on [834] the second page.

Q. To the end of that message, please.

A. Port Hardy, 300 overcast, occasional light rain, light snow.

Annette, 1,500 broken ceiling, occasional visibility 7 miles—correction. It is 1,500 broken, occasionally 700 obscured, visibility one mile, light snow showers. Comox—I don't recall this particular designation, WYJ, with the next two letters, broken.

Seattle-Tacoma, 2,000 broken, clouds 4,000—that is the terminal—overcast.

Portland, 1,200, overcast.

Signed, Seattle meteorologist, that is, Northwest Airlines, filed 191249 Pacific Standard Time.

Q. Does that filing statement indicate the time you would have transmitted the message?

A. I didn't transmit the message.

Q. From the time it was transmitted?

A. At the bottom of the message, 191249 PST would indicate the time the message was filed, yes.

Q. What time Pacific Standard Time was the message transmitted? A. 12:49.

Q. After the crash, isn't it a fact that several aircraft, at least, one aircraft, landed at Annette to pick up emergency equipment and supplies to take to Sandspit? [835] A. Yes, sir.

Mr. Riley: That is all the questions I have, if the Court please.

(Testimony of Gene Kingston.)

Redirect Examination

Q. (By Mr. Koch): Do you know whether or not that terminal forecast was delivered to the flight?

A. I don't recall definitely that this particular message was. I know that Northwest received forecasts for Sandspit and Annette Island. I can't recall the message numbers, because they don't give that over the air to the pilot.

Q. If that message was transmitted at 12:49 A.M. Pacific Standard Time, I wonder if you would check that exhibit A-5 to familiarize yourself with delays and other messages that were transcribed, and then answer, if you can, when that message might have been delivered, might reasonably have been expected to have been delivered to the flight, if it was delivered at all.

A. These forecasts I know were delivered to Northwest Flight 324 at the first of the difficulty, when he advised that his engine was inoperative and the oil cooler was broken.

Q. I am talking about this particular terminal forecast. I want to know about what the time lag would be from [836] transmission to receipt, if this particular one was received.

A. In other words, you want me to—I couldn't estimate.

The Court: We want you to do something to speed up this examination.

A. I couldn't estimate exactly when the pilot would receive this just by looking at the time.

(Testimony of Gene Kingston.)

Q. What is the usual time for transmission of a message? A. Just a very few minutes.

The Court: This is redirect examination, is it not?

Mr. Koch: Yes, your Honor.

The Court: Bring it to a close speedily, please.

Q. Can you, referring to that map which is Plaintiffs' Exhibit 6, estimate where Northwest Flight 324 of the 17th would have been when that message would have been delivered, if it was, with reference to the map?

A. I would estimate in between southwest Dickson and southwest Sitka.

Q. How far from Sandspit?

A. I would say about 70 miles.

Q. How far from Annette Island air base?

A. From Annette, approximately the same distance.

Q. About equidistant? A. Yes, sir.

Mr. Koch: I have no further questions. [837]

The Court: Is there anything further?

Mr. Riley: No, your Honor.

The Court: You may step down. Call the next witness.

(The witness was excused.)

PAUL H. SANDERS

called as a witness by defendant, was sworn and testified as follows:

Mr. Riley: Before the questioning of this witness, I wish to call the Court's attention to the first

(Testimony of Paul H. Sanders.)

day of this trial and defendant's motion to quash subpoenas issued to Northwest Airlines, and particularly that subpoena which was issued to Northwest Airlines by one Mr. Paul H. Sanders, who is the—I have forgotten his title. Counsel took the position that Mr. Sanders was not within the jurisdiction of this Court. The fact of the matter is that Mr. Sanders has been in this courtroom every day of this trial, and the Court indicated that if Mr. Sanders was not in the jurisdiction of this Court, within 100 miles, that the subpoenas would not be enforced and that Mr. Koch's objections thereto would be sustained. Now, after Mr. Sanders having sat in here every day of this trial, plaintiffs having been denied the right to have offered his testimony at a part of their case in chief, I [838] believe the defendant should be precluded from using Mr. Sanders as their own witness in rebuttal to the plaintiffs' case.

Mr. Koch: Your Honor, that is a not unexpected misstatement. The discussion at the outset of this case was solely related to whether or not the subpoenas served on the statutory agent for Northwest Airlines were effective to compel the attendance of Mr. Judd, Mr. Sanders, Mr. Curry, Mr. Middlestat, and other persons who are stationed at the home office in Minneapolis.

The Court: The objection is overruled, with the privilege of opening up plaintiffs' case in chief, if and when, for the purpose of asking this witness some question which he is not permitted to ask on

(Testimony of Paul H. Sanders.)

cross examination, which question or inquiry the Court deems, upon being advised, is material to the plaintiffs' case in chief. You may have that right reserved with like effect as if he had been here and you had called him to the witness stand.

Mr. Riley: May I state again, for the record, Mr. Koch's objection at the time was that these witnesses were outside the 100 mile limit.

Mr. Koch: My objection was his subpoenas were not effective to compel his attendance. Mr. Sanders has been here. Mr. Riley has seen him a hundred times and didn't [839] even inquire as to his identity. He could have done so at any time.

The Court: Please let bystanders not indicate approval or disapproval, pleasure or lack of pleasure in statements made by those connected with the trial. You may proceed.

Direct Examination

Q. (By Mr. Koch): Will you state your name, please? A. Paul H. Sanders.

Q. And your address?

A. 7208 James Avenue South, Richfield, Minnesota.

Q. What is your present employment?

A. I am presently employed by Northwest Airlines as director of line maintenance and ground services.

Q. Were you employed by Northwest Airlines on January 19, 1952? A. Yes, I was.

(Testimony of Paul H. Sanders.)

Q. How long have you been employed by Northwest Airlines? A. Since 1949.

Q. And how long have you been engaged in the field of aviation?

A. Exclusively since June, 1932.

Q. Will you relate your previous duties and experience in the field of aviation?

A. For a number of years, actually from 1932 until 1937, I [840] worked in the Experimental Division of the Glenn L. Martin Company in Baltimore, Maryland. Subsequent to that, I was employed by the same company as a service engineer assigned for duty with the Royal Air Force, British Royal Air Force, the French Air Force, South African Air Force, and in the latter days of World War II, with the United States Air Force and the United States Navy.

Q. What were your duties with the Air Forces of those various governments?

A. To assist them in putting airplanes into service, crew training, mechanical training for their maintenance units, accident investigation, general all around service engineering type of activities.

Q. What is your present position with Northwest Airlines?

A. Director of line maintenance and ground services.

Q. What was your position on January 19, 1952?

A. I was assistant manager of the Inspection Division.

Q. Did you participate in the investigation of

(Testimony of Paul H. Sanders.)

the accident occurring to Flight 324 of the 17th, of January 19, 1952, operated by Northwest Airlines?

A. Yes, I did.

Q. Have you participated in the investigation of other aircraft accidents prior to and subsequent to the subject accident? A. Yes, I have. [841]

Q. Does your accident investigation experience include accident investigations of aircraft other than Northwest Airlines accidents?

A. Considerable experience in the investigation of military accidents.

Q. In connection with the investigation of this accident, were you assigned to take part in the investigation in an official capacity? A. Yes.

Q. By whom? A. In the Sandspit accident?

Q. Yes.

A. Yes, I was assigned to assist the Civil Aeronautics Board in the investigation of this particular accident by Northwest Airlines.

Q. When did you arrive at Sandspit?

A. My recollection of the date is January 20th. However, it was a Sunday afternoon following the accident, which I believe occurred early Saturday morning, and this happened to be late Sunday afternoon following the accident.

Q. Did you inspect the aircraft?

A. As much as was possible under the circumstances.

Q. Can you estimate how far the aircraft was located from the south end of the runway?

A. It is my guess, or my recollection, that the

(Testimony of Paul H. Sanders.)

aircraft was [842] something in the vicinity of half a mile from the beach.

Q. From your investigation, had the aircraft withstood the impact of the water well?

A. Yes, I think it had.

Q. Was there or was there not substantial damage apparent?

A. Well, there was some fairly substantial damage apparent to the left wing of the aircraft, the left outer wing of the aircraft. There was some damage to the nose of the aircraft. Of course, during the ensuing three or four days, additional damage was done by the changing of the tide, but at the time, this is the damage that I recall. This was the day we arrived.

Q. Was any attempt made to tow the aircraft?

A. Prior to my arrival, apparently there had been an attempt made by some individuals on the scene to try—to attempt to beach the airplane by towing it around the point, so-called, Sandspit Point.

Q. Were they able to do that?

A. I think they were successful in moving the airplane a slight distance, but not other than that.

The Court: Why couldn't it be moved by normal efforts?

The Witness: The equipment was not available, I think, at the time to move it.

The Court: Was the terrain over which it might have been moved, aside from the condition of the water, agreeable [843] to moving it?

(Testimony of Paul H. Sanders.)

The Witness: No. The presence of a bunch of large rocks in this area would have precluded moving it very far.

The Court: How far below the surface was the top surface of those rocks, if you know?

The Witness: Depended on the tide. Some of them were out of water at low tide.

Q. Was it moved any closer to shore by the attempted towing?

A. I cannot tell you that, because I do not know the direction that they attempted to tow it, except it was my understanding that they attempted to move it closer towards the point east of the airport.

Q. During the course of the inspection, was the nose gear assembly found? A. Yes.

Q. Was it available for an inspection?

A. I think the—about two days prior to my arrival there, the nose gear assembly washed up on the beach. It was pretty well intact, and it was available for inspection.

Q. What facts were disclosed, if you recall, from your examination of the nose gear at that time?

A. There were some pretty evident things by an inspection of the nose gear. The predominant one was that the nose gear was somewhere in the general vicinity of its up and locked position at the time the aircraft had hit the water. This [844] fact was established by markings on the up lock attachment of the gear itself.

Q. Were you able to tell from your inspection

(Testimony of Paul H. Sanders.)

whether or not the pilot had attempted gear retraction prior to the accident?

A. The fact that the gear was in the up position, in some general area of up, would indicate that the gear had been retracted or started to retract.

Q. Was that observation confirmed or refuted by the inspection made by divers who went underwater?

A. Yes. Sometime during the ensuing week, we secured the assistance of some RCAF, Royal Canadian Air Force divers, and at my direction one of these divers checked the two nacelles on the aircraft, and which the two main landing gears are stowed when they are retracted, and the observations there indicated that both of these landing gears were in the nacelles, in the up position.

Q. Are the main landing gears connected in any way with the nose gear on a DC-4?

A. The three gears are operated by the same hydraulic system, and by the same hydraulic control.

Q. Does the same lever in the plane retract all the gears?

A. The control available to the pilot, the landing gear lever controls all three gears, and by placing it in the up position, the three gears would start to move towards the [845] up position.

Q. In what order do the gears retract?

A. On the DC-4, the nose gear tends to retract because of its smaller size and less resistance, tends to retract at a slightly faster rate than the two main gears. It is a matter of two or three seconds

(Testimony of Paul H. Sanders.)

difference in which the nose gear reaches the up position, several seconds before the two main gears.

Q. From your observation, can you conclude, or would you not, should one find that because the main gear had reached the up position, that the pilot had attempted to retract the nose gear?

A. It is my opinion that the pilot had attempted to retract the landing gear. It would be fairly obvious, with the facts that were available to us at the time of this investigation, that that attempt had been made and was generally successful because the gear was in the up position.

Mr. Riley: I would like to know what all this has to do with the accident. As a pilot, I can testify any pilot in his right mind would have attempted to pull this landing gear.

The Court: The objection is sustained.

Mr. Koch: We are attempting to show through this witness what caused the plane to fail to successfully take off from the airstrip. [846]

The Court: It is enough he has said what he has found. Let the Court draw the deductions therefrom.

Q. What were you able to observe with respect to the runway and field conditions at Sandspit?

A. The landing strip, the runway at Sandspit at the time of our arrival there, was lined by a windrow of snow on either side that had completely covered the normal electric runway boundary lights. There was still considerable snow and slush, frozen

(Testimony of Paul H. Sanders.)

slush, at this time on the runway. The runway at this time was lighted with oil-burning flares.

Q. How high were these windrows of snow?

A. They varied from two to four feet, I'd say.

Q. How wide is the runway?

A. The normal width of the runway is 150 feet. The windrows of snow were inside of those perimeters.

Q. How much of that 150 feet did the snowbanks and lights take off?

A. Somewhere between 10 and 15 feet they would have taken up, total.

Q. On each side?

A. I would say from 7 to 8 feet on each side.

Q. Was there only one runway at this airport?

A. It is a single runway.

Q. Do you recall the length of the runway?

A. Yes, 5,150 feet. [847]

Q. Is this runway sufficient in length for a DC-4 to land?

Mr. Riley: I object. I don't think he is qualified as a pilot.

Mr. Koch: I don't understand that you have to be a pilot to know the propensities of an airplane.

The Court: Is he speaking for the owner? Is he the highest-ranking owner you expect to call as a witness?

Mr. Koch: Yes, your Honor.

The Court: The objection is overruled. Read the question.

(Last question read by reporter.)

(Testimony of Paul H. Sanders.)

A. Yes.

The Court: The answer was heard by the Court as "Yes."

Q. Would the condition with respect to the runway width and length and the fact that there was snow on the runway present abnormal conditions, in your opinion?

A. I would consider them abnormal.

The Court: I am going to have to make an order next week relating to your constantly referring to your notes and waiting an unreasonably long time in between questions. You are going to have to expedite these examinations. Since the trial began, you could have familiarized yourself enough with the questions you wanted to ask witnesses without referring to notes. You are not entitled to [848] refer to notes every time you ask a question, before you go on to the next one.

Q. How did the field conditions as you observed them affect the ability of the plane to stop at the time the attempted landing was made?

A. Well, the slush, the snow and slush on the runway would definitely affect the aircraft's ability to come to a stop. The narrowness of the runway would also be an affecting factor.

Q. Was there risk, in your opinion, of veering into a snowbank or otherwise having a landing accident that might have accounted for the decision to go around?

A. With the weather conditions that were prevalent, along with the physical conditions on the run-

(Testimony of Paul H. Sanders.)

way, there is a good possibility the airplane would want to weather cock into the southwest wind that was blowing. Coupled with the narrowness of the runway, there would be a possibility of running into a snowbank.

Q. Would this have an effect on the pilot's decision to land or take off?

A. Yes, it would.

Q. What would the effect be?

A. In order to keep the airplane heading straight down the runway, he would have to apply differential power and braking and use nosewheel steering. This type of action uses up more [849] runway. The pilot may elect, because of that, to take off or to increase power so he can retain directional control and make another takeoff.

Q. What were the risks incident to the attempted go-around?

A. I didn't follow your question.

Q. He weighed those risks of a landing accident, I would assume, against possible risks in attempting to make the plane airborne again?

A. Yes.

Q. What were those risks?

A. Generally speaking, there weren't any. The attempt or the decision to go around again would be a fairly normal decision under the circumstances, because——

Mr. Riley: If your Honor please, I would like to object. Is this witness a pilot?

The Court: Sustained.

(Testimony of Paul H. Sanders.)

Q. In reaching his decision, would the pilot have any assistance from Civil Air Regulations, and particularly Part 41 of those regulations?

Mr. Koch: Will you hand the witness Plaintiffs' Exhibit 33?

A. Would you repeat the question?

(Last question read by reporter.)

A. Well, in reaching his decision to land at Sandspit——

The Court: Will you answer yes or no? [850]

A. Yes.

Q. Will you state what that assistance was, or what guidance he had?

A. Part 41, as it was written at the time, required the pilot to land at the nearest suitable airport.

Q. In attempting to go around, what are the steps the pilot must take?

Mr. Riley: I object. This man has not been shown to be a pilot. I don't see how he can tell.

The Court: The objection is sustained.

Q. Did you find evidence in your investigation that the flaps had not been retracted?

A. No.

Q. Are DC-4's designed to operate and take off on three engines?

A. They are certified to operate, take off, on three engines.

Q. What happened during the course of the flight of 324 of the 17th from Anchorage to Mc-

(Testimony of Paul H. Sanders.)

Chord Field which caused the pilot to change his flight plan?

Mr. Riley: I object. He is leading the witness. I realize it takes up the Court's time, but I don't think he should be permitted to lead the witness.

The Court: Avoid leading. Ask him for his information.

Q. Do you have any information as to the circumstances which occurred during the course of the flight which resulted in the Sandspit landing, or attempted landing? [851] A. Yes.

Q. Will you state what that is?

A. Flight advised somewhere between Anchorage and Sandspit that they were feathering No. 1 engine because of a failed oil cooler. This necessitated shutting down the No. 1 engine and proceeding on three engines.

Q. What is the effect of a broken oil cooler?

A. No. 1 effect is the loss of engine oil.

(Four photographs marked Defendant's Exhibit A-31 for identification.)

The Court: What kind of object do those photographs purport to reflect?

Mr. Koch: It is the engine and the oil cooler.

The Court: Are these a series of photographs of the No. 1 engine and its corresponding oil cooler?

Mr. Koch: Yes, your Honor.

The Court: They are four in number, all marked as one exhibit, is that your understanding?

Mr. Koch: Yes, your Honor. I ask that they be handed to the witness.

(Testimony of Paul H. Sanders.)

Q. Will you please explain what those pictures are? A. These are photographs.

Q. Of what?

A. Of a No. 1 engine on a DC-4, showing both the engine and the oil cooler and the oil cooler cowling. [852]

Q. Were certain of those pictures, looking top to bottom, taken from the cockpit?

A. Yes, I think with one exception they were taken from the cockpit. There is one here that seems to be a view from the other side of the engine.

Mr. Koch: I offer them, your Honor, for illustrative purposes.

The Court: Any objection?

Mr. Riley: No objection, your Honor.

The Court: Admitted, to illustrate the witness' testimony.

(Defendant's Exhibit A-31 for identification received in evidence.)

Q. Even though the pilot said that there was a broken oil cooler, is there any way to determine whether this is a guess or whether it could have been based on fact?

The Court: Answer yes or no.

A. Yes.

Q. How could you tell that?

A. Well, the oil cooler, its regulator and oil temperature control mechanism are pretty well confined in a stainless steel shroud, of which the oil cooler scoop is a part of. Evidences of oil leakage in that area would indicate the oil cooler or some

(Testimony of Paul H. Sanders.)

of its attendant plumbing and controls was where the oil leakage was coming from. [853]

Q. Do you know whether or not this could have been determined by the pilot, flying at night?

A. From the——

Mr. Riley: I object. I think we are going to ask a man who is not a pilot.

The Court: Answer yes or no.

A. Yes.

Q. Will you explain your answer, if you can?

The Court: The objection is overruled.

A. The evidence of oil leakage in the general vicinity or the immediate vicinity of the oil cooler would indicate to the pilot that something within the oil cooler cowling was leaking oil.

Q. Can that be observed at night?

A. That can be observed at night through the use of the Aldis lamp carried on board or through the use of the wing lights which illuminate the engines and leading edge of the wing.

Q. Would the loss of oil be apparent from indicators in the cockpit?

A. It would be apparent if it were of sufficient magnitude; it would become apparent on the oil quantity gauge for the particular engine involved.

Q. What kind of damage is produced by an oil cooler failure?

A. Well, an oil cooler failure in which the [854] engine is allowed to continue will eventually result in damage to the engine, a possible overspeed on a propeller or an uncontrollable propeller, which

(Testimony of Paul H. Sanders.)

would seriously handicap the pilot's ability to fly the airplane.

Q. Do you know whether or not these possible things could have taken place in flight?

A. Yes.

Q. Could the damage that resulted from this oil cooler have been detected by careful inspection at Elmendorf in Anchorage? A. No.

Q. Do you know whether or not the oil cooler was inspected at Elmendorf? A. Yes, it was.

Q. Is there a Northwest procedure and a CAA regulation directing when oil coolers shall be overhauled? A. Yes.

(Manual reference page marked Defendant's Exhibit A-32 for identification.)

(Manual reference page marked Defendant's Exhibit A-33 for identification.)

(Manual reference page marked Defendant's Exhibit's A-34 for identification.)

The Court: Let opposing counsel see those.

Q. What is what has been marked A-32? [855]

The Court: If you know.

A. I do know. This is a copy of a manual reference page from Northwest Airlines mechanical manual, Volume D, covering engine changes.

Q. Does that exhibit deal with overhaul of oil coolers?

A. No, this exhibit concerns itself with engine changes and the work necessary at the time of an engine change.

(Testimony of Paul H. Sanders.)

Q. Does an engine change include the change of the oil cooler? A. Yes.

Q. How often is it required to change the engine and oil cooler?

A. Scheduled engine changes and oil cooler changes are 1,500 hours.

Q. Do you have before you A-33? A. Yes.

Q. Do you know what that is?

A. This is another manual reference from Northwest Airlines mechanical manual, Volume D, covering inspection procedures as they affect DC-4 engine installations.

Mr. Koch: I will offer A-32 and A-33 in evidence.

Mr. Riley: No objection.

The Court: Admitted.

(Defendant's Exhibits A-32 and A-33 for identification received in evidence.)

Q. With respect to A-33, how often are oil cooler inspections had? [856]

A. Oil cooler inspections are inspected on a daily basis. They are also inspected as part of the basic power package at each 100 hour and number check.

Mr. Koch: May the witness have Exhibit A-34?

Q. If you know what that is, will you state it?

A. This is another manual reference from Northwest Airlines mechanical manual, Volume D, covering fuel and oil systems on DC-4 aircraft.

The Court: Which one?

The Witness: A-34.

(Testimony of Paul H. Sanders.)

Q. What is significant with respect to oil coolers in that exhibit?

A. This manual reference covers the removal and installation and repair of oil coolers.

Mr. Koch: I will offer it in evidence.

Mr. Riley: May I ask the witness a couple of questions?

The Court: You may.

Mr. Riley: That commences at page 3 of the oil system section of the Northwest Airline manual, doesn't it?

The Witness: That is correct.

Mr. Riley: Pages 1 and 2 are missing?

The Witness: Page 2 is attached to the back of page 3.

Mr. Riley: Where is page 1?

The Witness: Page 1 is not here, as I see it. [857] There is an additional page here, on reference the same manual, covering repair of oil coolers. Page 1 is not here.

Mr. Riley: The document is incomplete, if the Court please. I object to it, accordingly.

Mr. Koch: We have only produced the records that are relevant to the case. If page 1 had anything to do with oil coolers——

The Court: The objection is overruled. Defendant's Exhibit A-34 is now admitted.

(Defendant's Exhibit A-34 for identification received in evidence.)

The Court: Will the witness please look at A-33 again and repeat for my convenience what he has

(Testimony of Paul H. Sanders.)

already said, or should have said, the thing is?

The Witness: It is a manual page from mechanical manual, Volume D, covering power plant inspection procedures.

The Court: That means an engine inspection, does it not?

The Witness: Yes, sir.

Q. Is the oil cooler a separate unit?

A. Yes, it is.

Q. Would malfunctioning of the engine have any effect on the oil cooler attached to the engine?

A. No. [858]

Q. Would malfunctioning of an oil cooler have any effect on the engine? A. Yes, it would.

Q. Can you explain your answer?

A. Well, malfunctioning of the oil cooler would cause a subsequent engine failure if proper procedures were not effected at the time the malfunctioning was discovered.

Q. Was the type and style of the oil cooler on this flight a standard type used on DC-4 aircraft?

A. Yes.

Q. What did the Northwest Operations Manual and CAA regulations provide at the time of the accident with respect to action to be taken when a four-engine aircraft loses an engine?

A. The aircraft was to proceed to the nearest suitable airport and effect a landing.

Q. With respect to maintenance requirements, is there any difference between scheduled flights and contract flights?

(Testimony of Paul H. Sanders.)

A. No. They were both conducted under Part 41.

Q. Do you know whether or not the prescribed emergency gear on Flight 324 of the 17th was on the plane when it left Seattle? A. Yes.

Mr. Koch: May the witness have the pre-flight inspections, A-29 and A-30? [859]

Q. Is A-29 the pre-flight inspection at Seattle?

A. Yes, it is.

Q. Does that exhibit show that the emergency gear was aboard when the flight departed Seattle?

Mr. Riley: Mr. Koch is consistently leading the witness.

The Court: The objection is sustained.

Q. Can you state whether or not that pre-flight inspection establishes a check of emergency gear upon departure? A. Yes.

Q. Might that gear have been removed en route at Tokyo, Shemya or at other points?

Mr. Riley: Same objection, if your Honor please. He is continually leading him.

The Court: Avoid leading.

Q. Was it the practice or was it——

The Court: “What have you to say is the practice, if there was any, regarding such and such situation or thing?” That would be one way.

Q. What would you say with respect to the practice of the maintenance department with respect to removing emergency gear or other gear from the plane from time to time during the course of a round trip flight?

A. Well, it would be entirely possible for the

(Testimony of Paul H. Sanders.)

military to give us a load, in effect, that was a [860] cargo load, and which would necessitate removal of seats, life rafts, life vests, at such a point as Tokyo.

Q. Does A-30 indicate whether or not the same emergency gear that was on board when the flight left Seattle was still on board when the flight left Anchorage for Seattle on the return leg?

A. Yes, it does.

Q. Does the manual prescribe a regular inspection of the emergency equipment? A. Yes.

Q. How is it possible to determine when life vests must be changed?

A. By calendar date which is carried on the container of each life raft and life vest. These dates are reviewed at the departure of every flight, at the origination of every flight, and on the basis of their dates, they are either removed for inspection or it is determined they are OK to continue.

Q. How often is inspection required?

A. This type of inspection is required at the origination of each flight.

Q. I mean on the date that appears on the life vest itself.

A. Semi-annually, or to be checked if the life vest was subjected to any use during the period.

Q. How can you tell whether it was subjected to use? [861]

A. They were in sealed containers, containers which had a small seal across the connection, across the clasp that held the container closed. If that seal

(Testimony of Paul H. Sanders.)

was broken at any time during a trip, the life vest was removed and subjected to a complete inspection.

Q. Do you know how often inspections were made with respect to the dates or whether or not the seals had been broken?

A. Prior to each flight origination.

Q. What kind of inspection was provided with respect to the life rafts?

A. The life rafts were subjected to pretty much the same type of regulation. They, too, carried an identifying tag with a date on it, an inspector's stamp on that tag. They were inspected for the same type of thing. If the seal was broken, the life raft was removed and re-inspected completely.

Q. Now, with respect to maintenance of the aircraft, what procedures were invoked by Northwest Airlines on general engine and working part maintenance?

A. The maintenance procedures and program effected by Northwest Airlines is that which is pretty well described by CAR's, with routine inspections being performed as required by law.

Q. What is required by law with respect to periodic inspections? [862]

A. Those times will vary with each given airline. However, for Northwest Airlines at this time, the DC-4 aircraft was set up on an inspection required every 100 hours.

(Maintenance check marked Defendant's Exhibit A-35 for identification.)

(Testimony of Paul H. Sanders.)

Mr. Koch: May I have the exhibits from the pre-trial order which have not been introduced yet, defendant's exhibits?

The Court: If you have more exhibits, bring them out now and let them be marked.

(Copy of letter marked Defendant's Exhibit A-36 for identification.)

(Copy of letter marked Defendant's Exhibit A-37 for identification.)

(Letter marked Defendant's Exhibit A-40 for identification.)

(Service record marked Defendant's Exhibit A-41 for identification.)

The Court: Where are A-38 and A-39? Have they been previously marked?

Q. With respect to the emergency gear on Flight 324 of the 17th, were inspections made when the flight left Tokyo?

Mr. Riley: He is leading the witness again.

The Court: Avoid leading.

Q. Do you know whether or not inspections [863] were made when the flight left Tokyo?

A. Yes.

Q. And when the flight left Shemya?

A. Yes.

Mr. Koch: I want to identify these exhibits.

The Court: What is 36, if you know, A-36?

The Witness: A-36 is a true copy of a letter.

The Court: Relating to what subject, if you know?

(Testimony of Paul H. Sanders.)

The Witness: Relating to maintenance reports on ship 601.

The Court: Is there any objection?

Mr. Riley: Each and every one of these remaining documents, A-36-41, were prepared after the crash, are self-serving declarations, are not the records of the maintenance. As to A-36, was not that report prepared after the crash, to report from other records what the other records showed?

The Witness: Yes.

Mr. Riley: And it was prepared as a report having to do with the investigation of the crash, after the crash?

The Witness: It was prepared as part of the investigation of the crash.

Mr. Riley: Isn't it true that each of the other documents, A-37-A-41, were also rendered after the crash as a part of the report and are not original [864] records of maintenance prior to the crash?

The Witness: A-39 is a report by a captain who flew this particular airplane prior to its departure from Anchorage.

Mr. Riley: Isn't the report rendered after the crash?

The Witness: Yes, it is.

Mr. Koch: Your Honor, I would like to ask some questions which will establish the admissibility of these exhibits.

The Court: You may do so.

Q. Where are the originals of the records of

(Testimony of Paul H. Sanders.)

which this information purports to be extracted by these offered exhibits?

A. The original maintenance record of the airplane, the original record as far as the aircraft is concerned, went down with the airplane. It was part of the ship's log.

Q. What is Northwest Airlines required by the CAB to do, if you know, with respect to the aircraft log carried aboard the aircraft?

A. We are required by law to carry the log on the airplane and to leave certain copies, in this case, to leave certain numbers of log pages on board the airplane.

Q. Are the pages eventually removed from the airplane?

A. They are removed at stations such as [865] Seattle.

Q. What becomes of those removed log pages?

A. They are returned to St. Paul, to the Records Section.

Q. Is that information on the log page recorded in St. Paul, do you know?

A. Sometimes; not as a standard procedure. Sometimes they are.

Q. Are the log pages kept in St. Paul?

A. The log pages are maintained.

Q. Are they ever disposed of? A. No.

Q. Are you required to keep such records?

A. By law, we are required to keep such records.

The Court: That is true when the airplane is in service, is that right?

(Testimony of Paul H. Sanders.)

The Witness: That is correct.

The Court: What is the ruling, if any, regarding conduct of a similar nature respecting any matter and thing concerning the aircraft after it is destroyed?

The Witness: We are required to retain them for three years.

Q. With respect to the log pages that went down on the airplane, do you know whether or not the CAA requires reports of the nature in your possession to be prepared and submitted?

A. Yes, the CAB requires reports such as this nature to be submitted in cases where log pages are lost aboard an aircraft. [866]

Q. Do those records supplant the aircraft log and the company file of this aircraft?

A. These are records of the work done and signed for in the aircraft log at the time it passed through these stations.

The Court: Concerning matters and things occurring when with reference to the crash landing of this airplane Flight 324?

The Witness: These are items of a maintenance nature that were performed prior to the accident on the flight that the accident occurred on.

The Court: And not afterwards, is that right?

The Witness: And not afterwards.

The Court: Does any one of those records reflect any matter or thing which came into being or occurred subsequent to the crash landing of the aircraft?

(Testimony of Paul H. Sanders.)

The Witness: These are reports——

The Court: Answer yes or no.

The Witness: Yes, sir.

The Court: Does any one of them, A-35 to A-40 inclusive, reflect any information which came into being only after the crashing of the airplane?

The Witness: These reflect information that was known at the time.

The Court: I am trying to see if any one of them concerns any matters which occurred after the crash. [867].

The Witness: No, sir. These are all matters that occurred before the crash.

The Court: Did they relate to the servicing of the aircraft?

The Witness: They did.

The Court: You may inquire.

Mr. Koch: I think you completed it, your Honor.

The Court: Is there any objection?

Mr. Riley: Yes, your Honor, because each one of these is identical to the same things we objected to yesterday. They are not original maintenance records. These are extracts from other records, and the extracts are made after the date of the accident.

The Court: Where are the originals, Mr. Sanders?

The Witness: Two of these appear to be originals signed by, one, the chief mechanic in Anchorage; and, two, the chief mechanic in Tokyo.

The Court: These are in your company's files,

(Testimony of Paul H. Sanders.)

the original of this paper in each case, A-35, A-36, A-37, A-38, A-39 and A-40?

Mr. Koch: These that aren't originals are covered by the stipulations saying the copies may be substituted. As for the information itself, they were on the log. That was not recovered after the accident.

The Court: If all of the things which are in [868] question had originally been made, one by the ribbon impression on a typewriter, and the others by carbons of the ribbon impression—is this one of those copies? That is what I want to know, or is this a digest, a summary, or something that was made to convenience somebody after this airplane was lost?

Mr. Koch: I think I can answer you this way——

The Court: From the witness.

Q. Do those letters purport, if you know, to extract the information that was on the log that went down with the airplane? A. Yes.

The Court: This trial is continued until next Tuesday morning at 10:00 o'clock, subject, however, to calling counsel and the parties back before this Court to resume the trial proceedings earlier if the Court should finish other business on Monday.

(Brief discussion among Court and counsel re length of trial.)

The Court: You are excused until 10:00 o'clock Tuesday morning.

(Recess.)

Mr. Koch: Your Honor, at the close of court

(Testimony of Paul H. Sanders.)

Friday, the Court had before it for consideration the admissibility of Exhibits A-36, A-37, A-38, A-39 and A-40. [869]

The Court: Yes, they were marked very near the close of the proceedings.

Mr. Koch: Yes, your Honor. At this time, I wish to withdraw from the Court's consideration A-36, because it is identical with A-37, and it was a matter of inadvertence on the part of counsel.

The Court: Do you like the appearance of A-37 as something better to work with than A-36?

Mr. Koch: Yes, your Honor. A-37 is the original, and A-36 is the copy.

The Court: The Court approves that choice. Is there any objection to this withdrawal?

Mr. Riley: No objection to the withdrawal, your Honor.

The Court: A-36 is now withdrawn and returned to counsel who produced it, and I ask the clerk to delete the clerk's file marks. You may now proceed.

Mr. Koch: I will ask Mr. Sanders to resume the stand. May these exhibits be handed to Mr. Sanders?

Q. Mr. Sanders, referring to Exhibit A-37, will you explain to the Court how this was made, and from what source the information which it comprises came?

A. This particular document is a report from the Anchorage line maintenance station, and was necessitated by the fact that the logbook for the

(Testimony of Paul H. Sanders.)

airplane involved in this accident was lost on board the airplane. [870]

The Court: Referring to what exhibit number?

The Witness: A-37.

The Court: It would be helpful if you would keep your voice raised clear and distinct so all present can hear you.

A. As I stated, the aircraft logbook was lost with the airplane. In order to keep our records which we are obligated to keep on each aircraft, the activity report from each of the stations handling the airplane on the flight involved were saved and a report made from each of those stations on work performed on the airplane, maintenance performed on the airplane, that their activity reports indicated they had done.

Q. Who was the report made to?

A. This is a report made to the superintendent of line maintenance, St. Paul, by the chief mechanic at Anchorage.

Q. What is the use made of that material submitted to the St. Paul office?

A. This is a means of keeping the maintenance record on this particular airplane, because the logbook, which is the maintenance record, was not available.

Q. Do you know whether or not the information corresponds to information either in the mechanic's logbook at the station involved, or from the pilot's logbook, the log carried on the plane? [871]

(Testimony of Paul H. Sanders.)

A. Ordinarily, the information is an excerpt from the logbook.

Q. Which logbook?

A. From the aircraft logbook. It would include the pilot's comments and corrective maintenance action, if taken.

Q. What were the last log pages on this airplane received in St. Paul, if you know?

A. To the best of my knowledge, they were log pages covering the trip prior to January 15, I believe, the in-bound trip into Seattle prior to the out-bound trip off of which this accident occurred, somewhere in the early part of January.

Q. To what extent is the testimony you have just given with respect to A-37 applicable to A-38, A-39 and A-40?

A. They are identical reports from other stations handling the aircraft involved; one from the chief mechanic at Tokyo, another from the station manager at Shemya.

Q. Do any of those reports purport, if you can tell, to be copies of what was contained in the log?

A. A-38 is a copy of items contained in the log, and A-40. Correction to my statement: A-39 is a captain's report on the flight involved in-bound from Shemya to Anchorage.

Q. What about A-40?

A. A-40 is a copy of the aircraft log items into Shemya, and the corrective maintenance action taken by the Shemya station.

(Testimony of Paul H. Sanders.)

Mr. Koch: I offer these exhibits in evidence as—— [872]

The Court: Which ones?

Mr. Koch: A-37, A-38, A-39 and A-40. Those exhibits as a group purport to continue the history of the maintenance and service done on this plane from January 15 to January 19, 1952. The information was not self-serving in its nature. It was prepared because the CAB authority required a complete history to be maintained on all flights and on all engines, and this was done as the only means of fulfilling the requirement, since the original records were lost.

Mr. Riley: May I inquire?

The Court: You may do so.

Mr. Riley: Each of these exhibits, A-37, 38 and 39, were prepared after the crash of the aircraft, were they not?

The Witness: From records that were made after the crash of the airplane, that were made at the time the——

Mr. Riley: And there were records made before the crash by other personnel who prepared these reports?

The Witness: The record I am speaking of is an activity report maintained by each station, and is maintained for a month or so, and not kept as a permanent record.

Mr. Riley: And these are not the activity reports?

(Testimony of Paul H. Sanders.)

The Witness: These are the maintenance items extracted from those activity reports. [873]

Mr. Riley: They are extracted after the crash of the aircraft, and they are extracted by personnel of Northwest Airlines?

The Witness: That is correct.

The Court: Where are the things from which they were extracted; that is to say, where are the records from which these reports extracted information now reflected in these Exhibits A-37, A-38, A-39 and A-40?

The Witness: Those reports were not retained as permanent records. They are activity reports.

The Court: When were they discontinued as records?

The Witness: They are still carried as records, but they are not retained for any appreciable length of time.

The Court: Where are they?

The Witness: At the stations involved.

The Court: Where are the stations involved?

The Witness: Tokyo, Shemya, Anchorage.

Mr. Riley: I renew my objection.

The Court: The objection is sustained. They should be here subject to cross examination.

Mr. Koch: They are not in existence any more, your Honor.

The Court: This witness has not so stated.

Mr. Koch: He has, your Honor, I beg to differ.

The Court: I did not so understand him, and the Court directs counsel not to dispute the Court. You

(Testimony of Paul H. Sanders.)

might ask, to furnish additional information, but do not dispute the Court. This witness has not said that they are not available. He has said that they were at the stations where—I understood him to mean, where they were made. If you have some more questions to ask this witness, you should devote your attention to that, rather than disputing with the Court. Proceed.

Q. Do you know how long the records from which these offered exhibits were prepared were retained by the stations making them?

A. It was a practice to retain this type of activity report for roughly one month, and then they were destroyed.

The Court: With reference to the loss of this aircraft, that is to say, the occurrence of this accident at Sandspit, when, if they were, were they destroyed?

The Witness: I could not say. This was a record that we were not required to maintain by law. This was a worksheet, more than anything else. Once that particular period was past, the record was removed and no longer used.

The Court: Does anyone else wish to ask any further questions?

Mr. Riley: This is not all of the information that was available, I take it? You state these are extracts? [875]

The Witness: These are the maintenance items from the activity report.

(Testimony of Paul H. Sanders.)

Mr. Riley: The personnel that prepared these still work for the company?

The Witness: I would have to check that. I couldn't state that now.

Mr. Riley: I still think——

The Court: The Court will not admit these exhibits until counsel for defendant shows me some authority directing the Court to do so, for the reason that I think it is not explained satisfactorily to this Court why original records made before this accident happened, which counsel for defendant company now regard as material, were not preserved, in view of the importance of the event about which these summarized records are now offered, which reports are based in part upon those original records which since this accident presumably have been destroyed. It seems to me everything about the nature of this incident involved in this litigation calls for the preservation of every record that was made in the ordinary course of business as an original record which could throw any light upon that, no matter whether the company might think it had made a record since the accident that is interchangeable or not.

Mr. Koch: Your Honor, with respect to the [876] exhibit included in this group which simply states it is the exact copy of the pilot log on the subject, the stipulation entered into that this should be accepted in lieu of the original is, in my judgment, sufficient.

The Court: I will consider that stipulation. I

(Testimony of Paul H. Sanders.)

was considering the oral proof made here on this stand on this occasion, and supplemented in any way material by what was said on Friday of last week regarding the authentication of these documents.

Mr. Koch: On page 2, your Honor, the first three exhibit numbers thereof no longer correspond with——

The Court: Let opposing counsel see it.

Mr. Koch: He has a copy, your Honor. Page 2, the first three designated exhibits are three of the exhibits which are under consideration by the Court now, though they bear different numbers on that stipulation.

The Court: What is the number of the first one? There are about four with check marks.

Mr. Koch: The ones that are checked are the three I had reference to.

The Court: There are 4, beginning with A-18 relative to material contained in a letter dated January 21st from Jaffray at Shemya to Gehringer in St. Paul. Then there is A-19.

Mr. Koch: The one you just read is A-40, your Honor. [877]

The Court: That is A-18, is it, A-40?

Mr. Koch: Yes, your Honor.

The Court: A-19 is a report concerning the Tokyo crew chief's log, contained in a letter January 21, 1952. The date of this accident was the 19th, was it not, of January?

Mr. Koch: That is A-38, your Honor.

(Testimony of Paul H. Sanders.)

The Court: That letter is dated January 21, 1952, two days after the date of this accident, and it is from Mr. Greer, the defendant's chief mechanic at Tokyo. It is addressed to Mr. Gehringer at St. Paul. There is a third one, A-20. Which one is that?

Mr. Koch: What does it contain, your Honor?

The Court: A-20 comprises maintenance reports on ship 342 contained in a letter dated January 19, the very day of this accident, from N. B. Lynn, defendant company's chief mechanic, and Mr. Shelley, defendant company's relief crew chief at Elmendorf Air Base, to the defendant's Gehringer at St. Paul.

Mr. Koch: That is A-37, your Honor.

The Court: Is there another one?

Mr. Koch: Yes, your Honor. I don't have a copy, but the letter from Captain Hohag, dated January 24th. He was the pilot from Shemya to Anchorage, and I believe——

Mr. Riley: Referred to in the stipulation as A-17. [878]

Mr. Koch: It is on the bottom of the first page.

The Court: Does what is on the bottom of the first page concern any exhibit which you wish here to deal with at this time?

Mr. Koch: On the last line of the first page, there is a reference, I believe, to A-17, which is a leteter from Captain Hohag to Mr. Cox.

The Court: Is that the one that I mistakenly said that caused you to assign A-20 to it?

(Testimony of Paul H. Sanders.)

Mr. Koch: No, your Honor. We are correct on our numbers. This is the fourth item, and it is A-39.

The Court: So A-34 is what was formerly A-17, is it?

Mr. Koch: Yes, your Honor.

The Court: That is a letter dated January 24th, which is about five days after this accident.

Mr. Koch: That is correct.

The Court: Is there anything else? There is still a fifth exhibit, A-35.

Mr. Koch: That one is an original and won't be difficult. I haven't offered that one yet.

The Court: This letter which is now marked A-39, as I said, is dated the 24th of January, five days after the occurrence of this accident. It is from Mr. Hohag. He is captain of flight 324, and I don't know whether it means that he served as [879] such captain from Shemya to Anchorage. It may be.

Mr. Koch: That is what it means.

Mr. Riley: If your Honor would refer to the stipulation, the second paragraph on page 1 of the stipulation now in your Honor's hands——

The Court: Line 14, page 1?

Mr. Riley: Yes, your Honor. The words, "That the documents which have been identified by counsel as described hereinafter are true copies of original documents in the possession of the defendant Northwest Airlines, and that the said copies may, if otherwise admissible, be admitted in evidence in lieu of the originals."

(Testimony of Paul H. Sanders.)

Referring to Exhibit A-39, I cannot understand Mr. Koch asserting that that would be otherwise admissible. It is the rankest of hearsay, a statement by a captain not now in court, probably still employed by Northwest Airlines, made five days after the crash.

The Court: The Court holds that a report or a communication commenting upon an original exhibit is not admissible unless—among other things, but certainly unless the original thing on which it makes comment is brought forward in the courtroom and submitted for cross examination. There is no showing in this case sufficient to justify the destruction which has been referred to of the [880] original things about which these exhibits were created. These things are manufactured things. They are not things created in the ordinary course of an everyday business as a normal business practice, but they are something that was done after the event which is here in dispute, namely, the occurrence of this accident; with one exception, I believe, and that is the one which was dated the very same day of the accident, and I don't know when with reference to the occurrence of the accident, but it was so near to it as to raise in the Court's mind an inquiry of great caution lest it be something which was purposely substituted for an original document by somebody—not by this witness, does the Court charge; not by counsel, does the Court charge—but by somebody who may have had the financial interest of this defendant at

(Testimony of Paul H. Sanders.)

heart. So this objection and these objections to each and all of these exhibits which are copies—I am not talking about the original things made in the ordinary course of business—are sustained.

Mr. Koch: Your Honor, I would like to make an offer of proof.

The Court: You may do so.

Mr. Koch: I wonder if I may have the briefest reference to——

The Court: Proceed to make the offer of proof, or else pass the point. [881]

Mr. Koch: I offer to prove that Exhibits A-37, A-38, A-39 and A-40, comprising reports of the mechanical condition of the plane on January 17, 1952, at Tokyo, at Shemya, and at Anchorage, and the report of the pilot who flew the last leg that the plane completed, Captain Hohag, from Shemya to Anchorage on January 18, 1952, would demonstrate clearly that the plane was properly serviced mechanically; it was checked regularly; it was found to be at each of these points in safe and proper operating condition; and that no difficulties which subsequently caused the flight to lose the No. 1 engine existed in any of these points covered by the above referred to exhibits.

The Court: Opposing counsel has an opportunity to state his position on the offer that was made.

Mr. Riley: I think that the letters themselves and the testimony of the witness in regard to the same indicate that they are extracts, and they are made afterwards, and as such constitute self-serving

(Testimony of Paul H. Sanders.)

declarations and are offered in lieu of the original records, which have admittedly been destroyed. I don't think anything else needs to be said. Thank you, your Honor.

Mr. Koch: I would like to call the Court's attention to the rule admitting records made in the ordinary course of business, and refer to the fact [882] that these records were required to be made in the event of an airplane accident by the Civil Aeronautics Administration, and they were made because the original record, which was the pilot log, was destroyed. Since this record was the only official original record of the entries made en route, the copy which the Court says should have been kept for the purpose of litigation was also inadmissible, under the Court's ruling, as I understand it, because the only original record went down with the ship.

The Court: I am not talking about the copy. I am talking about the original. The persons who made the original, as well as the persons who made these copies, so far as anything to the contrary is here shown, may be produced as witnesses and testify to what the facts are, irrespective of these exhibits. The objections are sustained, insofar as they relate to these things which are in the nature of a report reflecting a study of other records. If there is one of these which is not that sort of thing, I want you to call it to my attention.

Mr. Koch: One purports to be an exact copy of the record that is not in evidence, and under the

(Testimony of Paul H. Sanders.)

stipulation, since that record, the Court has indicated, would have been admissible, I should think that one exhibit——

The Court: What is the number of it?

Mr. Koch: Exhibits A-38 and A-40 purport to [883] be exact copies of the records from which they were made.

The Court: Let opposing counsel see them.

Mr. Riley: Unless Mr. Koch is testifying that these are not extracts, I believe the witness has already said that they are merely extracts.

Mr. Koch: I don't understand the witness to have so testified, your Honor.

The Court: A-38 is dated January 21, two days after the accident, and it quotes a report from some office, "The following is the report from the Tokyo crew chief's log," and that log, as I understand from counsel offering this, was destroyed after this event.

Mr. Koch: Yes. Mr. Riley has stipulated that that is a copy of the original of the log.

The Court: I did not so understand. I understood that the matter relating to copies was a matter concerning the thing which is offered being a copy of some original paper. This is an original, itself.

Mr. Koch: I think the sentence reads, if you have the stipulation——

The Court: "* * *" that the documents which have been identified by counsel as described here-

(Testimony of Paul H. Sanders.)

inafter are true copies of original documents. * * *"
This is no true copy of any original.

Mr. Koch: It says it is a copy of the pilot's log. [884]

The Court: It does not say that. It does quote something in it. The thing itself, namely, the communication, is not a copy.

Mr. Koch: Your Honor, this is a signed original. I don't know it could have any other meaning. We are not offering a carbon copy. This is an original.

The Court: Because what it is is a report on something else, it is not the act of anybody. It is not anything which Mr. Mechanic said to Mr. Cost Superintendent in the ordinary course of Mr. Mechanic's duty and Mr. Cost Superintendent's duty, that this is the fact of what I am now today doing in the ordinary course of my business. What it is is a report from a subaltern to a superior employee, which in its essence is a copy from another document which this company, as stated by this witness, destroyed after this accident.

Mr. Koch: It was not destroyed when it was made; it was destroyed after this letter was written, before this lawsuit was brought.

The Court: The objection and the objection to the offer are sustained, for the reasons which the Court has already stated. There is no justifiable reason presented explaining why those original records were destroyed by this company after this accident, which was such an important incident in

(Testimony of Paul H. Sanders.)

[885] the life and business of this defendant company. Anybody in the world would be put upon notice that such a record about such an important thing might be needed in the future for any and many legitimate purpose or purposes. You may proceed.

Q. Handing you Plaintiffs' Exhibit 22, are you familiar with the subject matter contained in that exhibit? A. Yes.

Q. On the large card, does it have a name by which I can refer to it?

A. The large card is entitled, "DC-4 type Master Aircraft Log."

Q. On that Master Aircraft Log, does it show the times since overhaul on the No. 1 engine of plane 601?

A. It is a record of all of the engines on 601.

Q. Does it show the total time since overhaul of the No. 1 engine at the time of the accident?

A. Yes, it does.

Q. What number of hours does it show?

A. This record shows 1725 hours and 16 minutes.

Q. On the small cards—I think they are called Engine Accessory Cards, are they not?

A. Engine Accessory Record.

Q. Does it show the time since overhaul of the No. 1 engine at the time of the accident?

A. No, not at the time of the accident. [886]

Q. Does it show the time since overhaul at the time the engine was put on the plane?

A. It indicates that.

(Testimony of Paul H. Sanders.)

Q. What was that date?

A. The 17th of December, 1951.

Q. And on that date, what was the time since overhaul of the No. 1 engine?

A. Total time of the No. 1 engine of 555 hours, 16 minutes.

Q. 555 hours, 16 minutes? A. Yes.

Q. Can you determine from the large card what the total elapsed time on the No. 1 engine was on December 17, 1951?

A. I will have to calculate that.

Q. Will it take you long?

A. The time as of December 17th?

Q. Yes.

A. The time on the large card indicates on December 17, 1951, 1346 hours and 06 minutes.

Q. 1346 hours and 06 minutes compared with 555.16 on the other record? A. Yes.

Q. Are you able to explain this discrepancy?

A. Yes, I think I can.

Q. Will you, please?

A. Subsequent to the accident involving this [887] particular airplane, Northwest Airlines was advised by TWA of a discrepancy in engine time.

Mr. Riley: I object. He is making reference to hearsay. I ask that it be stricken accordingly.

The Court: The objection is sustained. It is stricken, and the Court will disregard it.

Q. Will you, if you are able to, will you explain the discrepancy from your own knowledge?

(Testimony of Paul H. Sanders.)

The Court: Was not the discrepancy the subject of the hearsay?

Mr. Koch: No, the discrepancy of the time shown on one record compared to the time shown on the other record.

The Court: What two records are you referring to?

The Witness: The first record is DC-4 Master Aircraft Log.

The Court: Does it have a number in this case?

Mr. Koch: All in Plaintiffs' Exhibit 22, your Honor.

The Court: Plaintiffs' Exhibit 22 is said to be a company record of the No. 1 engine showing the operation time, that is in hours, or times since the overhaul, etc. Read the question.

(Last question read by reporter.)

The Court: Able without reference to some other record other than what you have just stated.

A. The record on this particular engine was [888] corrected subsequent to——

The Court: Which? Is that record identified by an exhibit number? If so, what?

The Witness: Your Honor, they are both on the same exhibit, Plaintiffs' Exhibit 22.

The Court: You may proceed.

The Witness: The time indicated on December 17th was corrected subsequent to the accident to agree with the actual engine time as it was discovered during the course of investigation.

The Court: Which figure is now in the form

(Testimony of Paul H. Sanders.)

which it was made to have on that occasion subsequent to the accident?

The Witness: The time on the engine as of December 17, 1951, was corrected subsequent to the accident.

The Court: What is the figure that is so corrected?

The Witness: 1346 hours and 06 minutes.

The Court: That figure is something that went on this normal company record already in existence, but it was put on there after the accident, is that right?

The Witness: That is correct.

The Court: To conform with somebody's study or report, is that right?

The Witness: Yes, sir.

Q. Where did you get the information that the Northwest Airlines records as they existed at the [889] time of the accident did not correspond to the records maintained by Trans-World Airways?

A. We received information from Transcontinental & Western Airways—

Mr. Riley: Objection. He is making reference again to this information received from a third party.

The Court: He cannot state the information.

Mr. Koch: He hasn't your Honor. He said that was the source of his information.

The Court: The Court has heard his statement, and he has not done so, and I direct that he do not do so. Mr. Sanders, state if you know what

(Testimony of Paul H. Sanders.)

person in your company's employ directed that change and specifically authorized or instructed in such way as resulted in that one or some other employee writing in such employee's own handwriting the figures "1346" on that exhibit after the occurrence of this accident?

The Witness: I only have an opinion on who it might have been, your Honor. I can't tell you exactly who issued the instructions to change the record.

The Court: Did you do it?

The Witness: No, sir.

The Court: You say you do not personally know who did it?

The Witness: I do not personally know who [890] issued the instructions to change the record.

The Court: What persons have the duty and authority to direct the making of such a change, if you know? What persons in your company at that time?

The Witness: At that time, the manager of the mechanical division would have been the individual who would have issued the instructions to make the change.

The Court: Occupying what position?

The Witness: Manager of the mechanical division.

The Court: You may inquire.

Q. Do you know who had the responsibility for overhauling the engines leased from TWA?

A. TWA.

(Testimony of Paul H. Sanders.)

Q. What information did the company have with respect to the time since overhaul of the No. 1 engine on this aircraft before the accident?

Mr. Riley: That is a leading question, if the Court please. I haven't taken exception to a number of them. I think he should inquire if he knows.

The Court: I ask that you so word that question.

Q. Do you know whether the company had any information with respect to the time since overhaul on the No. 1 engine before the accident?

A. The office responsible for keeping time on engines did not have any information other than that change the record here indicates. [891]

Q. Was there any procedure established, if you know, for relaying the information on overhauled engines between TWA and Northwest Airlines?

A. There was a procedure.

Q. Can you explain it?

A. Under our agreement with Transcontinental & Western Airlines, we were to be supplied zero time engines, or in case of a part-time engine, the record section and the line maintenance office in St. Paul was to be notified of any part-time engine and the time that was on it prior to shipment to Seattle.

Q. Do you know what happened in this case?

A. Yes, I do.

Q. Will you relate that, please?

A. Neither the line maintenance office nor the records section in St. Paul were notified of this. However, the stock clerk in charge at the Seattle

(Testimony of Paul H. Sanders.)

station was notified of the time on this particular engine as part of the shipping papers that followed the engine to Seattle.

Q. How was he notified, if you know?

A. As part of the packing slip. The information was contained on the packing slip.

Mr. Riley: I will have to object to that. It is obviously not the best evidence. If there is such a [892] packing slip, let the defendant produce it.

The Court: The objection is sustained.

Q. Did the mechanical division in Seattle have information with respect to the time since overhaul of this engine? A. No, they did not.

Q. The mechanical division and the routing office in St. Paul, do you know whether or not they had information respecting the time since overhaul of the No. 1 engine?

Mr. Riley: I will have to object to that. He is leading the witness, calling for a hearsay answer.

The Court: Sustained.

Q. What information, if you know, did the mechanical division at St. Paul or the routing office in St. Paul have with respect to the time on the engine at the time it was received from TWA?

Mr. Riley: Same objection.

The Court: That objection is sustained. I instruct counsel to discontinue such questions as this. You may ask this witness what he knows about that, or what some other witness who may be on the stand, when he is on the stand, what he knows about that, if he knows anything about that, but

(Testimony of Paul H. Sanders.)

you cannot ask this witness nor any other such questions as you last stated.

Q. What information did you have with respect to the time since overhaul of the No. 1 engine when [893] it was sent to Northwest Airlines from TWA? A. None.

Q. And where were you located at that time? A. In St. Paul.

Q. What were your duties at that time?

A. At that particular time, I was the assistant manager of the inspection division.

Q. In the normal course, where would such information from TWA with respect to time since overhaul on an engine be received in St. Paul?

A. In the records section, in the maintenance office, and in the routing office.

Q. With respect to time since overhaul on engines received from TWA under this contract, was a part of your duties to receive such information and to be familiar with it? A. Yes.

Q. Do you know what kind of damage is produced by an oil cooler failure?

A. Primarily, the loss of oil.

Q. Do you know whether or not it is physical damage or heat damage of some sort?

A. Fairly common damage to——

The Court: One proper form of question would be to ask him to state, if he knows, what the cause is.

Mr. Koch: I stand corrected, your Honor. [894]

Q. Will you answer the Court's question?

(Testimony of Paul H. Sanders.)

A. The major cause for damage to oil coolers, by experience, has been due to ice, either ice forming within the area in the cooler core, or from ice thrown into the leading edge of the cooler from propeller de-icers. This is a physical damage, where it batters in the leading edge of the core and causes leakage.

Q. Do the records, Exhibits 22 and 23—will you check the exhibits before you, and when you have done so, advise the Court whether or not they cover servicing, maintenance and overhaul of the oil cooler assembly on the No. 1 engine of this aircraft?

A. Plaintiffs' Exhibit 23 is the aircraft logbook for DC-4 601 from 9/9/51 through 1/6/52. It covers the maintenance performed on the airplane through that period. I will have to check a little further to see whether it covers this particular oil cooler. This record covers the engine change that was made on the 17th. That's all I can tell you from the record here.

Q. The 17th of what?

A. The 17th of December, 1951.

Q. Does that record indicate whether or not the oil cooler was changed at that time?

A. This record does not indicate that the oil cooler was changed at that time. [895]

Q. Does the record in Plaintiffs' Exhibit 22 have any reference to oil cooler change?

A. In Plaintiffs' Exhibit 22, the oil cooler is

(Testimony of Paul H. Sanders.)

indicated as being changed on 12/17/51, at the time the engine was changed.

The Court: At this time, we will take a ten minute recess.

(Recess.)

The Court: All are present. You may resume the interrogation.

Q. What was the total time elapsed on the oil cooler, if you know and can tell from the records before you, when it was installed on December 17, 1951?

A. I will have to work this off the time card.

Q. At the time it was installed, not at the time of the accident.

A. The oil cooler was a zero time oil cooler at the time it was installed.

Q. It had no time on it?

A. It was a newly overhauled oil cooler.

Q. Are you able to determine from the records before you how long the oil cooler on the No. 1 engine had been in operation from the time of its installation until the time of the accident?

A. It was in operation from December 17th to the time of the accident, which would have been [896] the difference between 1346 hours and 1725 hours, roughly 400 hours.

Q. What is the significance, if any, of the fact that the No. 1 engine was overtime in itself but the oil cooler on the No. 1 engine had only 400 hours?

A. There is no significance.

(Testimony of Paul H. Sanders.)

Q. What is the time required between overhauls of the oil cooler?

A. The normal overhaul on an oil cooler is 1500 hours. However, oil coolers are changed with each engine change, or were at that time changed with each engine change.

Mr. Koch: Will you hand the witness Plaintiffs' Exhibit 30?

Q. Is there any relation between the fact that the engine was overtime and the oil cooler was not overtime so far as the failure of the oil cooler in this accident is concerned?

A. There is no relationship.

Q. In your opinion, would the overtime engine in any way contribute to the failure of the oil cooler on this flight? A. In my opinion, no.

Q. How much oil was consumed, if you know, by Engine No. 1 between Shemya and Anchorage on the return flight from Tokyo?

A. The record indicates a total of 10 gallons of oil.

Q. What was the average oil consumption of the No. 1 engine from Seattle to Tokyo and return as far as Anchorage? [897]

A. The over-all average was about .68 gallons per hour.

Q. What kind of engine was on the aircraft No. 1 position? A. A Pratt-Whitney R-2000.

Q. Do you know whether or not the manufacturer's limits covers normal oil consumption?

A. Yes, they do.

(Testimony of Paul H. Sanders.)

Q. Do you know what it is?

A. At the time the Pratt-Whitney maximum oil consumption per hour limit on this particular engine was two gallons per hour. However, we were using a figure much lower than that, a figure of one gallon and a half per hour as the maximum normal oil consumption.

Q. Did the pilot record in his logbook engine oil consumption?

A. Only after it exceeded one and a half gallons per hour.

Q. Does it do so on this flight at any time?

A. No, it did not. The segment of the flight in which the ten gallons of oil was used was a segment involving seven hours and seven minutes of flying time. The oil consumption would then figure out to about 1.4 gallons per hour for the No. 1 engine.

Q. What is the distance from Shemya to Anchorage? A. Roughly 1600 miles.

Q. Do you know whether or not the type of service check performed at Anchorage on this plane included a check for oil leaks? [898]

A. Yes, it did.

Q. Referring to Plaintiffs' Exhibits 22, 23 and 27, have you reviewed the maintenance and inspection records with respect to the No. 1 engine on 601?

A. Yes, I have, but I do not have those exhibits.

The Court: For the moment, I do not locate Plaintiffs' Exhibit 27. I cannot locate any action

(Testimony of Paul H. Sanders.)

taken by the Court on it. Who was testifying when the exhibit was admitted, if anyone?

Mr. Koch: I believe Mr. Matthews.

The Court: That is correct, and it was admitted in connection with his testimony. You may proceed.

Mr. Koch: Would you read the last question, please?

(Last question read by reporter.)

A. Yes.

The Court: Are those records so reviewed now in evidence as any exhibit, in whole or in part?

The Witness: Plaintiffs' Exhibits 23 and 27 are maintenance records.

The Court: Are the only ones you considered those named by counsel, those exhibit numbers?

Mr. Koch: 22, 23 and 27, your Honor.

The Witness: 22, 23 and 27, I have here.

The Court: Are those the only sources of information used by you in making answer to this last question? [899]

The Witness: There are other records available here in the court which are part of this record.

Q. What other records are there?

A. The No. 2 check records, etc., that are here.

Mr. Koch: I will withdraw this question and ask questions relating to the exhibit containing the records Mr. Sanders has reference to first, if it please the Court.

The Court: That will be agreeable.

Q. What is Exhibit A-35?

A. A-35 is the record for the No. 2 maintenance

(Testimony of Paul H. Sanders.)

check performed in Seattle on January 13 through 15, 1952, on DC-4 601.

The Court: If I were in your place, I would keep my voice raised clear and distinct, Mr. Sanders.

The Witness: Yes, sir.

Q. Is Exhibit A-35 original records prepared by the company at the time that inspection was made?

A. Yes, they are.

Q. What does that exhibit consist of? I notice there are several parts to it.

A. The exhibit consists of a ground check sheet; inspection progress report; non-routine inspection writeups; and routine work cards.

Q. When was that inspection performed?

A. During the period January 13 through January 15, 1952, at Seattle. [900]

Q. What is the method of making inspections adopted by Northwest Airlines on its aircraft?

A. The method is pretty well universal. It is prescribed by law, under the CAA. Each airline has specified maintenance periods at which routine maintenance and inspection is accomplished on each airplane. At the time of this accident, Northwest Airlines had approved a 100 hour inspection period, inspection and check period. This means that each 100 hours, a routine maintenance service was performed on each of its aircraft. In this case, each of these 100 hour services would have been performed at the Seattle station.

Q. At the end of each 100 hours, was the service

(Testimony of Paul H. Sanders.)

performed the same as at the end of the preceding 100 hours?

A. No, it was successively increased, so that at the end of a No. 4 check, in other words, at the end of 400 hours, a maintenance cycle was complete, each one progressively covering more of the airplane as it progressed toward the 400 hour interval.

Q. At what part of the cycle was the No. 2 check performed?

A. The 200 hour interval.

Mr. Koch: I will offer A-35 in evidence, your Honor.

Mr. Riley: We have no objection to that.

The Court: Admitted. [901]

(Defendant's Exhibit A-35 for identification received in evidence.)

The Court: What do you call it, Mr. Koch?

Mr. Koch: No. 2 inspection.

The Court: Does that denote the second of a series of inspections?

Mr. Koch: Yes, your Honor. This is the end of 200 hours.

Q. Taking into consideration Plaintiffs' Exhibits 22, 23 and 27 and Exhibit A-35, does that cover all of the information relative to maintenance of the subject aircraft, and particularly the No. 1 engine, available to the company?

A. It covers all the information for the period concerned.

Q. Considering these exhibits, what if anything

(Testimony of Paul H. Sanders.)

were you able to observe with respect to the No. 1 engine from its history since it was given a top overhaul by TWA in January of 1951?

A. The engine record indicates the engine was No. R-2000 engine, with the normal amount of maintenance and corrective action applied to it that you would expect in any other engine of its particular type.

Q. Did the history show anything of significance with relation to oil consumption? A. No. [902]

Q. I am referring to the No. 1 engine. Mr. Sanders, are you familiar with the type of life vests that were on the plane? A. Yes.

Q. What type were they?

A. Standard C.O.2 operated vest-type life jackets.

Q. Do you know whether or not the life vests on the plane at the time of the accident were the same as the life vests that were described in the ditching folder that has been introduced in evidence? A. Generally, yes.

Q. How do you know that?

A. I had occasion to observe some of the life vests that were on this particular plane. As part of my job, I by necessity have to keep familiar with this type of thing.

Q. Are those life vests made in accordance with any particular specifications?

A. Yes, I believe they are made to an AN spec, an Army-Navy specification.

Q. Do you know whether or not all of the life

(Testimony of Paul H. Sanders.)

vests that the company had in use at that time were made to such specifications? A. Yes.

Q. With reference to life rafts, Mr. Sanders, were they recovered after the accident?

A. Yes, both life rafts were recovered. [903]

Q. Where were they found?

A. They were both picked up from the beach. However, the day that I arrived in Sandspit, which would have been on Sunday afternoon——

Q. Do you know that date?

A. I think January 20th is the date. We made several low passes in the aircraft that I arrived in all over this area. At that time, we observed one life raft floating on the water some distance from the shore.

Q. When these life rafts were found, were they inflated or not?

A. They were not inflated. They were still in their containers.

Q. Were they subsequently tested with respect to their inflatability?

A. One of them was, and it checked out completely serviceable.

Q. At the time you arrived and saw this one raft floating, what was the condition of the airplane at that time?

A. It was still pretty well intact at the time.

Q. Do you recall the fuselage?

A. It was pretty well intact, too.

Q. Do you recall whether or not any of the other

(Testimony of Paul H. Sanders.)

contents of the plane had been washed ashore at that time?

A. No, not that early. Four or five days later, after heavy seas, some of the components of the airplane started coming up on the beach, but not as early as this time. [904]

Q. Were other contents of the fuselage recovered at about the same time as you noticed this life raft floating, or do you recall?

A. To the best of my knowledge, about the only thing that was floating at that time was personal clothing, overcoats, military overcoats, and that type of thing.

Q. Do you know whether or not other contents of the fuselage were located or found floating subsequently?

A. Subsequent to the time, quite a few things were found subsequently.

Q. Such things as what?

A. After four or five days, most of the interior of the cabin was—at least, parts of the interior of the cabin were found at various stages, either floating or on the beach, seat cushions, hat racks, galley equipment, and things of that nature, but this was sometime in the latter part of the following week.

Q. From these observations, is it your opinion that the life raft may have been launched by the crew or by passengers?

A. That is hard to say. Somehow or other, they

(Testimony of Paul H. Sanders.)

got out from under the straps they were tied down with and got afloat.

Q. What type of flares did the airplane carry?

A. This airplane, as all airplanes operating in transport service, carried two three-minute, parachute-type magnesium flares. [905]

Q. Could the parachute flares have been used at the time of the accident?

A. It is hardly probable, because parachute flares of this particular type, manually operated type of flare, has to fall about three hundred feet before the magnesium is ignited.

Q. Is it your opinion that this plane did not gain that altitude?

A. With the time element involved, it wouldn't seem to me there would have been time to drop a flare.

Q. Would the discharge of Very pistols have provided a little illumination, in your opinion?

A. Very pistols are not designed for illumination. They are designed for signaling.

Q. What have you to say with respect to the possible risk attendant to the use of Very pistols?

A. In the case of an airplane hitting water, with a lot of gasoline on the wings, it would be risky business to attempt to use a Very pistol in that area.

Q. What is that exhibit, 15?

A. It is a Northwest Airlines aircraft maintenance and inspection service bulletin, dated August 29, 1951, Bulletin No. 144.

(Testimony of Paul H. Sanders.)

Q. Does that bulletin show differences in configuration between the TWA plane and the Northwest Airlines plane, standard planes? [906]

A. The purpose of this bulletin at the time was to point out the differences in those airplanes acquired from other airlines to operate in the North Pacific airlift into Korea.

Q. Was that exhibit part of the Northwest Airlines maintenance manual at the time of the accident, if you know?

A. As a service bulletin, it became part of the maintenance manual.

Q. Assuming that this Northwest Airline plane was flying from Anchorage to McChord Field at an altitude of 10,000 feet at night on an overwater flight, and was proceeding with the No. 1 engine feathered to Sandspit, would you say the passengers should be apprised of the situation?

Mr. Riley: I will object to any testimony by this witness as to how aircraft should fly or performance of aircraft in flight, as not being shown he is a pilot or qualified as a pilot.

The Court: I understand he is offered as the litigant.

Mr. Koch: Your Honor, this exact hypothetical question was asked of Mr. Opsahl is at the Seattle-Tacoma Airport in the capacity of an inspector. He has the same general type of job as Mr. Sanders, except his is much more inferior. If that was a proper question of Mr. Opsahl, an answer to it

(Testimony of Paul H. Sanders.)

by Mr. Sanders would seem to fall within the objection that Mr. Riley makes.

The Court: You are not in this question [907] offering the answer of this witness as the answer of the litigant in this case?

Mr. Koch: I do, your Honor.

The Court: If this defendant were a natural person, that natural person as such litigant would be permitted to entertain and answer certain questions which an ordinary witness would not do unless the witness had certain qualifications. The qualifications rule as to a witness being permitted to state his opinion does not usually apply to the litigant. My understanding is that this witness is offered as the litigant in this case because, among other reasons, no other corporate official of the defendant will be offered as a witness to speak as the litigant, am I correct in that?

Mr. Koch: You are correct, your Honor.

The Court: The objection is overruled.

Q. Would you like to have the question reread?

A. Yes.

(Last question read by reporter.)

A. Not ordinarily, particularly at night where most of them would be asleep.

Q. Under those same hypothetical facts, Mr. Sanders, should the crew have readied the life rafts in advance? A. No.

Q. With respect to launching life rafts, Mr. Sanders, do you [908] know whether or not there

(Testimony of Paul H. Sanders.)

was any Northwest Airlines procedure or regulation relative to launching life rafts?

A. Yes, there was a procedure.

Q. Was that procedure followed here?

A. No, because this wasn't a planned ditching. This was a takeoff accident.

Q. In case of a planned ditching, do passengers launch life rafts?

A. No, that is the crew's responsibility. However, the crew may request assistance from an individual.

Q. A particular passenger?

A. A particular passenger, perhaps.

Mr. Koch: May I confer for just a moment, your Honor?

The Court: You may do that.

Q. Plaintiffs' Exhibit 27—do you know whether or not any mechanical difficulty with respect to the No. 1 engine of any importance resulted on the return flight from Tokyo to Shemya to Elmendorf?

A. To the best of my knowledge, the difficulties encountered through the flight with any of the engines were of a minor nature and had no bearing on the subsequent failure of the No. 1 oil cooler.

Q. Do you know whether or not any conditions reported with respect to the performance of the aircraft en route were corrected at the points en route, Shemya and Elmendorf, [909] before the flight took off from Elmendorf?

(Testimony of Paul H. Sanders.)

A. Those items which required correction were corrected.

Q. Do you know that from your own knowledge? A. From the record.

Q. Is that correct? A. That is correct.

Mr. Koch: No further questions.

The Court: You may cross examine.

Cross Examination

Q. (By Mr. Riley): This aircraft was delayed at Shemya for over four hours for a mechanical difficulty, wasn't it?

A. For a magneto change.

Q. Isn't a magneto change very serious? It is the most basic and most difficult difficulty you can have in an engine, isn't it?

A. Not in my opinion, no. A magneto change is a fairly common occurrence on anybody's airline, anybody's airplane.

Q. Magneto difficulty is not a minor difficulty at all. Do you classify magneto trouble as something that can be glossed over?

A. Something that can be corrected fairly easy, does not necessarily affect an engine. After all, dual ignition was provided. [910]

Q. You mentioned the crew in this case in the ditching off Sandspit following company procedures, and because this was an unplanned ditching, I take it from your testimony, on this type of ditching it is every man for himself?

A. I did not make that statement.

(Testimony of Paul H. Sanders.)

Q. Did you say the crews followed company procedures?

A. I said the procedures established by the company were procedures planned for planned ditchings.

Q. They have no procedures for unplanned ditchings? A. That is not true.

Q. Is there any difference between unplanned ditching and planned ditching as far as getting out of the aircraft is concerned?

A. There is a considerable difference between a takeoff accident and a planned ditching. This was a takeoff accident.

Q. You testified that the aircraft when you flew over it was in substantially good condition. You rendered a lengthy report after your return from Sandspit, and it was signed by you, do you recall that report?

A. A report was submitted to the CAB as part of our activities during the course of the investigation.

Q. Do you recall the statement set forth there, captioned Monday, January 21, 1952: "Although the sea was running fairly heavy, an observation crew consisting of Northwest [911] Airlines personnel Matthews, Sanders, Cox, Leonard, a boatman and one member of the Royal Canadian Mounted Police rowed around the aircraft for a period of time in an attempt to observe the amount of damage to the aircraft. The aircraft by this time had broken into two separate pieces. The

(Testimony of Paul H. Sanders.)

break occurred at a station immediately forward of the main entrance door. The aft section had moved approximately 100 yards east of the forward section. Not much else could be determined, and the party returned to shore.

“During this time, another party while searching the beach at low tide found the complete nosewheel assembly had broken loose from the aircraft and had been washed up to where it was recoverable at low tide.”

Do you recall that report?

A. That indicated the condition of the airplane on Monday.

Q. Did you observe the aircraft and row around it on that date? A. January 21st, yes.

Q. Is there any reason why in this report it was not reported at any time in the report that a life raft was observed floating?

A. This was a report on salvage activities at Sandspit, and was intended as such to show the effort expended to salvage this particular airplane.

Q. It states under the caption Tuesday, January 22, 1952: [912] “Many pieces of debris were found on the beach, including lavatory bulkheads and doors, cabin seats and sections of floor planking.”

Isn't a life raft of sufficient importance to have been mentioned in this report?

A. Probably so; however, it wasn't because this—again, I have to say this report was written with the intent to show the degree of salvage. We were

(Testimony of Paul H. Sanders.)

making every effort to recover the airplane in order to ascertain the reason for the accident.

Q. Referring to Plaintiffs' Exhibits 14 and 15, is there any mention in there or any reference made to life rafts, life jackets, survival equipment aboard this aircraft which were intended to be covered by Plaintiffs' Exhibit 15?

A. There is mention of the fact that there are some differences in cabin configuration.

Q. Referring to Plaintiffs' Exhibit 14, does that document make reference to Ship 601 or DC-4 45342? A. Yes, it does.

Q. Does it indicate the cabin configuration of that ship?

A. It indicates the basic seating arrangement, yes.

Q. Does it indicate the location of the life raft on that ship? A. No, it does not.

Q. What is the wingspan of a DC-4?

A. 119 feet, 6 inches or thereabouts. [913]

Q. Mr. Cox testified that with the snow piled on the sides of the runway, that the runway was approximately 120 feet wide. Would you say his estimate was approximately correct?

A. I would say that would be approximately right, yes.

Q. About six inches clearance between wing tips on the aircraft and the sides of the runway on landing at Sandspit?

A. Assuming the snowbanks were the same height.

(Testimony of Paul H. Sanders.)

Q. About how high was the snow piled on the edges of the runway?

A. I would guess four feet, maximum.

Q. There were no electric lights at the time of the crash on the field?

A. The electric lights were covered by snow.

Q. What type of lights, flare pots, did they have, do you know?

A. In use?

Q. In use. A. The oil-burning type flare pot.

Q. Do you know whether or not the company's investigation indicated that the rudder tab on ship 601 had been frozen as it cruised between Anchorage and Sandspit?

A. There was some indication of a pilot report that in the early part of the flight, the pilot felt the rudder tab may have been frozen. I think later on there was no further mention made of it. It was in the early part of——

Q. Do you know what the adiabatic lapse rate is? [914]

A. Vaguely.

Q. Would you say approximately what it is?

A. The standard temperature change with altitude.

Q. Does it increase or decrease?

A. It decreases with altitude, roughly five degrees per thousand feet.

Q. If the temperature at the field were 32 to 34 degrees, can you on the basis of your present information about adiabatic lapse rate estimate the temperature at 10,000 feet?

A. No, I couldn't, because it is a fairly common

(Testimony of Paul H. Sanders.)

phenomenon, with the temperature inversion, it could be 40 degrees at 10,000 feet and 30 degrees on the ground.

Q. Are you stating that is a fairly common phenomenon at 10,000 feet?

A. Temperature inversion at altitude is a fairly common phenomenon.

Q. Are you stating it would be a common thing for it to be 40 degrees at 10,000 feet if it were 34 degrees on the ground?

A. Not common, but not unheard of.

Q. It would be extremely unusual, as a matter of fact, wouldn't it? A. It has happened.

Q. If the pilot had reported a frozen rudder tab, it would be most unusual, wouldn't it?

A. As I stated before, it was my recollection the rudder tab [915] was reported in the early portion of the flight.

Q. If it had been reported as frozen in flight while cruising at 10,000 feet and the temperature on the ground was 32 degrees, wouldn't you consider it extremely unusual for that rudder tab to thaw out during the rest of the flight?

The Court: Mr. Riley, your rapidity of statement indicates more argument than not. Will you please try to form your question in a concise way and do not keep running on and on and on so fast that neither the reporter can record nor the Court can hear and understand your statement. I do not know whether the witness can hear you or not, but your questions take on an obviously argumentative

(Testimony of Paul H. Sanders.)

tone which neither the witness nor anyone else can really understand.

Mr. Riley: Thank you, your Honor. I will try to do so.

Q. Mr. Sanders, if a rudder tab had been frozen in the course of the flight at 10,000 feet and the ground temperature at the point of destination was 34 degrees, would you state whether or not you would assume that the rudder tab would still be frozen at the time of landing or not?

A. There is a good possibility that it still may have been frozen at the time of landing. [916]

Q. Tell us what the effect—assuming that the rudder tab froze prior to the loss of the No. 1 engine, would you tell us what the effect of the loss of the rudder tab would be as far as controllability of the aircraft is concerned?

Mr. Koch: I object to the question. There is no evidence in the record at any time that I can recall of the rudder tab being frozen, and now for the witness to assume that the rudder tab was frozen, after he has completed his case, and to ask for the witness to make additional assumptions based upon that hypothesis which is not in evidence, is carrying the point beyond all reasonable bounds.

The Court: What have you to respond?

Mr. Riley: I objected to his calling Mr. Sanders in the first place. As I recall, the Court reserved the right to go beyond the scope of cross examination and re-open. In the first instance, Mr. Sanders

(Testimony of Paul H. Sanders.)

has already testified it was reported the rudder tab was frozen.

The Court: Mr. Sanders, do you recall having so testified or made a statement on that point as to the freezing of the rudder?

The Witness: I think I stated in the testimony somewhere in the course of this accident investigation some statement was made that in the early portion of the flight, [917] the rudder tab was frozen.

The Court: The objection on that point is overruled.

Mr. Koch: That is just in cross examination he has made this statement. It didn't come up on direct.

The Court: The objection is overruled. Do you understand the question? Read the question.

(Last question read by reporter.)

A. It is my opinion——

Mr. Koch: I will ask one other question.

The Court: The objection is overruled.

Mr. Koch: I understand that, but I think that the question should ask if he knows, since he is not a pilot.

The Court: The objection is overruled. Counsel has a right to ask this question. This is cross examination.

A. It is my opinion, with the rudder control available on a DC-4, that an average pilot would be able to keep the airplane under directional con-

(Testimony of Paul H. Sanders.)

trol, insofar as the rudder is concerned, with a frozen rudder tab.

Q. Would it increase or decrease the hazard of landing on a 120 foot wide runway which was coated with snow of approximately six inches and was slippery?

Mr. Koch: I object to that. There is no evidence about the six inches of snow.

The Court: The objection is overruled.

A. May I have the question again, please? [918]
(Last question read by reporter.)

A. It would probably increase.

Mr. Riley: Does the clerk have Plaintiffs' Exhibit 32? It was rejected at the time of offer. I don't know whether it was returned or not, or whether counsel would have it.

The Clerk: It was withdrawn.

Mr. Riley: Does counsel have that portion of the manual dealing with three-engine ferry operations? It was marked Plaintiffs' Exhibit 32. I will pass to another question.

May the witness see Defendant's Exhibit A-31?

The Court: Received to illustrate the witness' testimony, Mr. Sanders.

Q. While we are looking for that, do you recall the approximate amount of delay from the time Flight 324 landed at Anchorage until it departed?

A. No, I don't recall the delay. However, it is my impression that there was a delay caused by the military authorities with some customs clear-

(Testimony of Paul H. Sanders.)

ance, some type of thing, for some considerable period.

Q. Before each flight, the crews of this aircraft do inspect the aircraft from the outside, is that right, before they board the aircraft?

A. The flight crew? [919]

Q. Yes. A. Generally, yes.

Q. Can you describe what you mean by this inspection? Is this a visual inspection of the exterior of the aircraft?

A. As far as the flight crew is concerned, it would be a walk-around type of thing.

Q. They don't remove any of the cowling from the nacelles in those inspections?

A. They certainly don't.

Q. Is this given any particular title, this type of inspection, a pre-flight inspection?

A. No, it isn't. The basic responsibility for releasing the airplane to the flight crew is held by maintenance. They are the people that make the complete inspection.

Q. Does a basic pre-flight inspection require the removal of the cowling of the aircraft engines prior to releasing the aircraft for flight?

A. No.

Q. At the time the aircraft was inspected at Anchorage prior to its departure for the United States, the inspection again consisted of an inspection of the exterior of the aircraft and the engine nacelles and the propeller assembly, is that correct? A. I think that is generally true.

(Testimony of Paul H. Sanders.)

Q. As I understood your testimony last week, you stated that [920] the oil cooler indicated—oil falling from that portion would indicate that oil was coming from the oil cooler, is that correct?

A. That is correct.

Q. Where is the oil sump located in the engine nacelle?

A. The rear end of the engine, in the lower half of the accessory case.

Q. Are there lines running from the oil sump to the oil cooler? A. No.

The Court: How much more time do you need to finish with this exhibit?

Mr. Riley: Just briefly.

The Court: I am not asking you to shorten the time.

Q. Is the oil cooler and the oil sump and the engine itself connected directly or——

A. They are not connected.

Q. How does the oil flow between the oil cooler to the engine?

A. Through the engine oil pump.

Q. Does it go through the oil sump and then to the engine?

A. From the cooler through the sump into the engine?

Q. Yes. A. No.

Q. Would you describe as briefly as you can the course of travel of oil in a complete cycle from the engine through the sump through the cooler?

A. Oil is returned from the engine to the tank

(Testimony of Paul H. Sanders.)

through the cooler, back into the engine through the pump.

Q. There are lines and hose flex lines connecting the sump, the engine and the cooler?

A. Obviously, there are lines between the cooler and the engine and the cooler and the tank.

Q. So that oil falling from the oil cooler section visible externally could be falling from the oil cooler, the oil sump above it, or anything in the engine nacelle above the oil cooler, isn't that correct?

A. No, I wouldn't say that. Oil leakage from the rear end of the engine or accessory in the engine would not follow that pattern. The oil cooler is completely baffled, for fire protection, primarily, top and bottom completely shrouded. It has fireproof flexible lines running through this baffling to the engine and to the tank. It is completely enclosed.

Mr. Riley: That is all I have with reference to this exhibit, if the Court please.

The Court: Court will be at recess until 1:30.

(Recess.)

The Court: All are present. You may resume the interrogation.

Mr. Riley: May the witness see Plaintiffs' Exhibit 29?

Q. Did you revisit the scene of the crash of the aircraft at [922] Sandspit, British Columbia, later in the year of 1952?

A. No, I did not.

Q. Was the scene revisited?

(Testimony of Paul H. Sanders.)

A. It was revisited by a representative of the Airline Pilots Association and a representative of the Flight Operations Department of the airline.

Q. Is that Mr. Helm? A. Yes.

Q. Is Mr. Helm here now?

A. Mr. Helm is dead since the accident.

The Court: After this accident occurred, what was the first date you visited the scene of it?

The Witness: I arrived on the scene of the accident January 20th.

The Court: After learning that an accident had taken place?

The Witness: That is correct.

The Court: To your knowledge, had any other company official from St. Paul reached the scene or undertaken any investigation?

The Witness: Not from St. Paul. Mr. Helm, however, who was chief pilot for the western region in Seattle, arrived there a day prior to my arrival.

The Court: And he of course undertook, did he, under your direction or someone else's direction, to take [923] steps which it seemed that the circumstances called for on behalf of the company?

The Witness: That is correct, sir.

Q. Did you observe the wreckage of the aircraft at low tide? A. Not at extremely low tide, no.

Q. As I understood your report that you submitted to the company, you made your way in a boat to the wreckage of the aircraft at low tide on the Monday following the crash. Wasn't that substantially your testimony?

(Testimony of Paul H. Sanders.)

A. Not at low tide, because at low tide it wasn't possible to do much operation in this area with a boat, because there was very little water in the area. There were some puddles and ponds. The low tide at the time of year the accident occurred was about 1 o'clock in the morning. We did attempt, however, one night after dark to walk to the wreckage and were almost successful except we had to call a halt to it because we got fogged in, and because of the fog decided to return to the beach.

Q. You could not reach the wreckage at that time? What was the reason for the revisit to the scene by Mr. Helm and others later in the year? Was it because the tide had been reported extremely low, or was there some other reason?

A. Many times during the year there were low tides. This happened to be the most opportune time, I suppose. I can't tell you why this particular date was picked. There [924] were some questions that were outstanding as part of the investigation, and the reason for the revisit was to, in effect, finalize those questions.

Q. Was the wreckage of the aircraft out of water during high tide?

A. At the extreme high tide, no.

Q. What portions of the aircraft were out of water at low tide?

A. During the eight or ten days that I was at Sandspit, at low tide, when it was possible to ob-

(Testimony of Paul H. Sanders.)

serve this at low tide, when it was in the daylight hours, the top of the fuselage.

Q. Do the pictures you have before you there represent the amount of exposure of the wreckage of the aircraft at low tide, approximately?

A. At the time these photographs were taken, there is very little left of the aircraft. Almost the entire fuselage is gone, so it is hard for me to say how much of it would be out of water at low tide so far as the complete airplane is concerned. There is very little left on these photographs except the center wing of a DC-4. Most of the rest has been carried away.

Q. Referring to the top photograph of the group designated as Plaintiffs' Exhibit 29, can you tell in which direction the picture is taken? In other words, what land is shown [925] in that picture? Would that be the nearest land to the aircraft?

A. It is awful hard to establish direction here. This is the Island of Moresby, but in what direction or what part of it, I can't tell you. There are no identifying landmarks here to make a guess on that.

Mr. Riley: May the witness have Exhibit 37?

Q. You have stated earlier that the history on engine 701355 showed a normal history and that there was no showing of abnormal or excessive oil consumption, is that correct?

A. I made the statement that oil consumption reported on the engine was not above the maximum

(Testimony of Paul H. Sanders.)

normal allowable oil consumption of one and a half gallons per hour.

Q. As a matter of fact, isn't it true that the engine No. 701355 was removed from ship 608 in May of 1951 for the precise reason that it was burning too much oil?

A. We are talking about the engine as it was installed on 601. That is correct, the engine was removed on 608, returned to TWA for overhaul because of oil consumption.

Q. The entire engine wasn't overhauled, was it?

A. It was given a—we established the fact after the accident that the engine was given a so-called top overhaul, in which all of the cylinders, pistons, piston rings, etc., those things which are normally associated with oil [926] consumption, were changed.

Q. What is the relationship of TWA in this operation? They are an independent contractor, rendered services to you pursuant to a contract. Is that a correct statement?

Mr. Koch: I object to that question until we establish the witness' knowledge of the law of independent contractors, etc.

The Court: I believe that objection should be sustained.

Q. Under what arrangement, so far as you know, was TWA hired, if that is the case, to repair this particular engine?

Mr. Koch: I object to that, too. There is no evidence that that was the fact.

(Testimony of Paul H. Sanders.)

The Court: The objection is overruled.

A. I can only tell you my impression of this thing. The contract arrangements, etc., I do not have a working knowledge of. I can tell you my impression of it.

Mr. Koch: I don't think the——

The Court: There is no question asked him. It is up to counsel to ask him another question.

Q. After 701355 was removed from ship 608, what if any action was taken with respect to the aircraft engine itself, No. 701355?

A. The engine was returned to TWA at Kansas City.

Q. What if anything was done to it at Kansas City?

A. It was given, as I stated before, which we found out [927] subsequent to the accident, it was given a top overhaul.

Q. Is it a fact that Northwest Airlines at Seattle was advised that the engine was given a top overhaul when the engine was returned to Northwest Airlines at Seattle?

The Court: On what date, if you know, or approximately what date?

Q. Do you know the approximate date when this aircraft engine was returned to Seattle?

A. I don't know at this time, no.

Mr. Riley: I would like to show the witness Plaintiffs' Exhibit 37.

The Court: You may do so.

Q. I show you what has been marked for iden-

(Testimony of Paul H. Sanders.)

tification as Plaintiffs' Exhibit 37. I note that your name appears on page 2 of that document. Do you recall having received this communication, dated February 6, 1952?

A. A carbon copy was addressed to me, apparently, at that date.

Mr. Koch: I am sorry to interrupt, but I haven't been shown the exhibit. I would like to know what it is.

The Court: If it is in evidence——

Mr. Riley: No, your Honor. This was earlier rejected, if the Court please.

The Court: Let him see the exhibit.

Q. While he is examining that exhibit, you have testified that the engine time records on engine No. 1 on the company [928] records in St. Paul were corrected after the date of the accident, is that correct? A. That is correct.

Q. And you have testified that in December the total time for this oil cooler was shown to have been 555 hours or in that neighborhood, is that correct?

A. No, I didn't make that statement. I said the engine records in December, at the time it was installed on this airplane, showed 555 hours, 16 minutes.

Q. The records to which you referred which related the time on the oil cooler assembly, do you recall what they reflected as the total time for this particular oil cooler component in January, 1951?

A. They did not reflect the time for this particular oil cooler. They reflected the time on the

(Testimony of Paul H. Sanders.)

engine at the time it was installed in the No. 1 position on this particular airplane.

Q. Is there any written record that you have in your possession or Northwest Airlines has in its possession which shows the flight time on the oil cooler components of engine No. 701355 on January 19, 1952?

A. Well, as I stated in earlier testimony, the oil cooler was changed at the time the engine was changed. Somewhere in the inspection records there is a detail card, and it has been here on the table. [929]

Q. Are you referring to the TWA detail card?

A. I am not referring to the TWA detail card. I am referring to the inspection record made in Seattle indicating the inspection of the oil cooler change at the time of the engine change on December 17, 1951.

Q. Whether it was or was not, this very oil cooler would have been removed again at the time the engine would have been removed if the engine had been removed at 1500 hours, isn't that correct?

A. Any time the engine is changed, or any time an engine was changed on a DC-4 at this particular time, the oil cooler was changed, whether it was a scheduled engine change or an off schedule engine change.

Mr. Riley: Referring to what has been marked for identification Plaintiffs' Exhibit 37, I will read the fourth paragraph, which states——

(Testimony of Paul H. Sanders.)

Mr. Koch: Just a minute.

The Court: Has it been admitted?

Mr. Riley: Pardon me, your Honor. It has not.

The Court: You cannot do that over objection.

Q. Do you recall receiving Plaintiffs' Exhibit 37?

A. As I say, the letter indicates I received a carbon copy of it, and I assume that I did.

Q. To whom is the communication directed?

A. Directed to Mr. D. S. Cox, Manager, Flight Operations. [930]

The Court: Is plaintiff trying to prove the admissibility of this document now?

Mr. Riley: Well, actually I don't care to admit the entire document. I would want to examine as to portions of it.

The Court: If you have not done so, and I question whether you have, in view of your response, consider the consequences of your cross examination on this exhibit. You may proceed.

Mr. Riley: Pardon me a moment, your Honor.

The Court: You may.

Mr. Riley: I will strike that, and ask that the witness see Plaintiffs' Exhibit 30. Does the witness have Plaintiffs' Exhibit 27?

Q. After engine 701355, the history of which is contained in Plaintiffs' Exhibit 27, was removed from ship 608 because of excessive oil consumption, can you by referring to Exhibit 27 tell what was done with engine 701355?

A. Without looking at the record, I know from

(Testimony of Paul H. Sanders.)

my own knowledge that the engine was returned to Kansas City.

Q. After it was returned from Kansas City to Seattle, do you know what was done with it?

A. It was installed in No. 4 position on ship No. 608 on 10/23 and removed on 12/5/51.

Q. After its removal, it was then installed in ship 601, [931] which was the aircraft which crashed at Sandspit on January 19, 1952?

A. It was held as a spare from 12/5 to 12/17, and then installed on ship 601 in No. 1 position.

Q. Does Plaintiffs' Exhibit 27 disclose that the engine was originally removed from 608 and sent to TWA at Kansas City because of excessive oil consumption?

Mr. Koch: That has been covered by previous testimony, your Honor.

The Court: Have you not gone into that point in this cross examination?

Mr. Riley: I will withdraw it. I didn't know I was repeating.

The Court: I am not certain that you have. I am asking you.

Mr. Riley: My co-counsel says I have covered that. I will withdraw that question.

Q. I will ask you to refer to Plaintiffs' Exhibit 30.

The Court: The record of No. 1 engine oil consumption. That is what the nature of the information is.

Q. Can you state by referring to Plaintiffs' Ex-

(Testimony of Paul H. Sanders.)

hibit 30 what the average hourly oil consumption was on the flight of Flight 324 between Shemya and Elmendorf on the 17 - 18 of January?

A. Yes. [932]

Q. Would you state what it is?

A. 1.41 gallons per hour.

Q. Does the exhibit indicate the amount of oil consumed by the No. 1 engine on that aircraft on the flight between Shemya and Anchorage on the 17 - 18 of January? A. Yes, it does.

Q. And what amount of oil did it consume?

A. Ten gallons in seven hours and seven minutes.

The Court: Ten gallons in seven hours and seven minutes.

The Witness: Ten gallons in seven hours and seven minutes.

The Court: That gallonage per hour for that amount of total is what?

The Witness: 1.41 gallons per hour.

Mr. Riley: I have no further questions, if the Court please.

Redirect Examination

Q. (By Mr. Koch): Was it the practice, Mr. Sanders, if you know, when an engine was changed and a different oil cooler installed on the plane, to install any available oil cooler that didn't have more than 1500 hours time on it?

A. No, that was not the practice. [933]

Q. What was the practice?

(Testimony of Paul H. Sanders.)

A. A zero time since overhaul oil cooler was always installed.

Q. If an engine was removed because it had close to the maximum of 1500 hours time on the engine and an oil cooler might only have two or three hundred hours, do you know whether or not the company would have that oil cooler overhauled anyway?

A. The oil cooler would be returned to overhaul.

Q. On the subject of the width of the runway at Sandspit, did you testify to the width?

A. I believe I did, yes.

Q. Do you recall your testimony?

A. Somewhere in the vicinity of 120 to 130 feet.

Q. Is that the original width or the width after reduction by flare pots?

A. That was the plowed width of the runway.

Q. The plowed width was how much?

A. My guess was between 120 to 130 feet.

Q. What was the height of the snowbanks on the sides of the runway?

A. There were some areas in the vicinity of the turn off taxi strip that maybe were as high as four feet. Other than that, I'd say they averaged two and a half to three feet.

Q. What is the height of the wings on the plane?

A. At the wingtip, you mean? I would offhand hazard a guess [934] from 12 to 14 feet.

Q. What is the height of the wing at the side of the plane?

(Testimony of Paul H. Sanders.)

A. Top surface, probably six and a half or seven feet off the ground.

Mr. Koch: I have no further questions.

The Court: Is there anything further?

Mr. Riley: No, your Honor.

Mr. Koch: Just a moment. There is a matter I wanted to bring to the Court's attention. On the direct examination of Mr. Sanders on Friday, I asked some questions and intended to go into the matter of what happened on the runway or when the plane took off on the runway, from that point to the point that the plane dipped in the water, that caused the plane to go into the water. I was asking about how the nose gear was retracted, and I was leading from that into matters that would have been offered to explain what actually resulted when the plane left the runway until the time the accident happened.

Mr. Riley interposed objections to the questions, and the Court sustained further inquiry along the line of the nose gear and possible retraction difficulties which I would have gone into. If the Court ruled considering that it wasn't in the plaintiffs' case and therefore it was just delaying the trial, and the Court isn't interested in that explanation, I have no objection to that, but if [935] the Court feels that—if it is incumbent upon the defendant to explain what happened that prevented the plane from accelerating in a normal fashion, then this evidence, it seems to me, should be admitted.

(Testimony of Paul H. Sanders.)

The Court: Have you offered any evidence that calls for this rebuttal?

Mr. Riley: I don't believe that I did, your Honor.

The Court: Do you seek in argument to draw any inferences from facts regarding that last point?

Mr. Riley: No, your Honor. My objections at that time were principally, among other things, because Mr. Sanders is not a pilot, in addition to the other, but I don't recall bringing anything out on cross examination that would require us to go into that area.

The Court: Do you intend to argue from the facts either as a circumstance indicated by the facts or as to somebody's direct testimony on the issue that he mentioned in his last statement?

Mr. Riley: I am not sure I understand.

The Court: Read Mr. Koch's statement.

(Last statement of Mr. Koch read by reporter.)

The Court: Do you tender by any allegation of proof that issue mentioned by him in his statement last made?

Mr. Riley: I am afraid that we would, your Honor. I think we would be entitled to rely as to this—— [936]

The Court: You may further inquire. I do not know whether the Court will rule in your favor upon any objection that may be made as to a particular question. It seems to me the condition that he found the nose gear in, if he got there quick

(Testimony of Paul H. Sanders.)

enough after the accident that it is the condition after the accident, would be admissible. I would think that would be admissible. I understand you have already examined him on that condition, have you not, the condition he saw?

Mr. Koch: Your Honor, I can't answer you directly. The nose gear was recovered and it was tested, and with respect to its mechanical performance, there is evidence that bears on the issue that I have raised.

The Court: In view of counsel's last statement, I will not rule that you may not ask him what he knows about the condition of the nose gear. I have the impression that you already asked him questions about the nose gear.

Mr. Koch: I asked him some of them, your Honor, but I had not completed the development of the theory of the accident.

The Court: The Court, notwithstanding the previous ruling, will permit you to ask him anything you haven't already about what he found to be the condition of the nose gear. By that I do not wish to validate him at this time as an expert witness on nose gear or as to his [937] qualifications to give opinion evidence on nose gear.

Mr. Koch: I will ask him questions in an attempt to so qualify him, your Honor.

The Court: I want you to go ahead, whatever it is. Proceed.

Q. (By Mr. Koch): Will you relate briefly your experience in dealing with nose gear problems

(Testimony of Paul H. Sanders.)

that the airline industry has faced in the last number of years?

A. Well, subsequent to this particular——

The Court: Answer that yes or no.

A. Yes.

Q. And did that experience relate to DC-4 type aircraft? A. Yes.

Q. What is the nature of your own efforts in that area?

A. Well, subsequent to the accident involved, we as well as other airlines in the country had some——

The Court: Are you asking him for his experience, or what is it his employer did?

Mr. Koch: I am asking for his own personal experience.

The Court: Don't say anything about "we". He asked you what you personally have done in that regard.

A. As a result of nose gear incidents on DC-4's subsequent to this particular accident, I participated in considerable [938] investigation on DC-4 nose gear steering and nose wheel retraction operations.

The Court: That was after this accident, did you say?

The Witness: That was after this accident.

Q. Did that experience cause further investigation of this accident to be made?

A. As a result of that, the CAB re-opened the accident investigation on this particular accident.

(Testimony of Paul H. Sanders.)

Q. Did you make further investigations at the time of the re-opening with relation to the nose gear problems and steering mechanism on this aircraft? A. Yes.

Q. Was the nose gear mechanism recovered?

A. Yes, it was.

Q. Do you know whether or not it was substantially intact? A. Yes, it was intact.

The Court: On what date, if you know, was it taken off the airplane?

The Witness: It was recovered on the beach, I'd guess about January 22nd.

The Court: It was not then taken off the beach attached to the airplane, is that right?

The Witness: That is correct.

The Court: Do you know when it came off the airplane?

The Witness: I have no idea. Sometime between the [939] time the accident occurred and January 22nd.

The Court: So I understand you to say the nose gear was reclaimed on the beach on January 22nd, is that right?

The Witness: On about January 22nd.

The Court: Is that on or about the third day after the accident?

The Witness: Third or fourth day. My memory is not positive as to which.

Q. Did you participate in the examination made of the nose gear and nose gear assembly on this aircraft? A. Yes.

(Testimony of Paul H. Sanders.)

Q. When was that investigation made?

A. As I previously stated, my memory is not positive as to the date, but I am of the opinion that it was January 22nd.

Q. What were your findings as a result of that examination?

A. The nose gear and nose gear steering mechanism had been broken out of the airplane in one completely intact unit. As far as examination from the surface was concerned, it appeared to be in good order. The nose gear up lock mechanism was also part of the assembly recovered, and it had evidence of having received a fairly hard blow in a vertical direction. This evidence was in the form of very heavy peening on the lower side of the nose gear up lock hook, and also evidence of the hook digging into the attach fitting on the nose gear olio, and both of these [940] indicated the nose wheel had been forced upward with a fairly heavy impact.

Q. What is the significance of your finding that the up lock—that the nose gear was up and locked, was that your expression?

A. Well, I did not intend to convey the impression that the nose gear was up and locked. I am trying to indicate that the nose gear was forced into the up lock with quite a heavy blow, much heavier than a normal retraction would give you. In other words, there was definitely signs of distress, both in the up lock hook and the attach fitting, the lock attach fitting on the front side of the olio.

Q. Is there any significance in that finding with

(Testimony of Paul H. Sanders.)

respect to whether or not the nose gear mechanism had been retracted?

A. Well, obviously the nose gear had to be somewhere in the general vicinity of up and locked to engage the hook when this heavy vertical blow occurred.

Q. Would that require some action on the part of the pilot?

A. Again, obviously the pilot would have to have retracted the gear for the gear to get in that general area.

Q. Did your examination reveal any evidence of mechanical failure of the nose gear?

A. No, there was no evidence of mechanical failure on the examination conducted at Sandspit and subsequent examination conducted on this gear after it was removed from Sandspit [941] as part of the re-opening of the accident investigation.

Q. Did you inspect the centering cams?

A. Yes, I did.

Q. What is the function of the centering cams?

A. The centering cams are a series of slotted cams designed primarily to center the nose gear prior to it being retracted into the nose wheel well. The nose wheel well was fairly narrow, and if the gear is not centered it will not go completely into the wheel well. It could conceivably lodge on the outside.

The Court: I have not understood you clearly. Did you intend to say finally that the condition of the nose gear and the nose gear steering mechanism

(Testimony of Paul H. Sanders.)

having been driven in some manner upward into or near their normal position while in flight and retracted, that you drew from that an inference that the pilot had accomplished such retraction, or had attempted to, before the crash?

The Witness: Yes, sir.

Q. How long does it take the nose gear to fully retract, if you know, approximately?

A. I'd say an average of about six seconds.

Q. From the end of the runway to the point of impact in the water would take approximately how much time?

A. Approximately 25 or 30 seconds.

Q. Does this lead to the possibility, in your opinion, that [942] the nose gear did not fully retract?

A. The markings as we observed them on the nose gear seem to bear that out.

Q. What could produce such a result? How does that come about, or could it come about?

A. During the course of this re-opened Civil Aeronautics Board investigation, we came up with facts surrounding other incidents that seemed to pretty well parallel these. They were coupled with takeoffs made from runways with snow or slush on them, takeoffs made with a slight crosswind, in both conditions necessitating the use of nose wheel steering right up to the takeoff time; and in cold weather the nose gear is a little slower to completely extend than it is in average temperatures. As a result, some of these instances when a nose gear retracted, it did not center. It stuck off the

(Testimony of Paul H. Sanders.)

centered position, and as a result, jammed prior to the time that it went completely in the nose wheel well and the doors closed after it.

The Court: We have the conclusion of this matter by this witness made the second time, the second time being no different from the first, that he found indications which pointed to his belief that the pilot had retracted this nose gear before the crash. Now, he has come to that conclusion twice. He did it last week; he has done it again. What more do you wish? [943]

Mr. Koch: My understanding of his answer was that he believed that the nose wheel jammed. Now, I am going to explain the significance of that.

The Court: I understood you had finished inquiry of this witness.

Mr. Koch: This same matter, relating to the cause of the accident.

The Court: I thought you had already finished with this afternoon's inquiry a moment ago. After the Court asked a question, you start asking this line of inquiry. I had the impression you had finished, and it has led to nowhere other than where you were last week.

Mr. Koch: I thought the last question did, and I am sure the next two will. I am almost finished.

The Court: Please proceed and finish with the examination.

Q. If the nose gear jams, what effect does that have on the operation of the plane, if you know?

A. Well, if the nose gear jams in a set of cir-

(Testimony of Paul H. Sanders.)

cumstances such as I have just related, the nose gear doors are stuck in the open position and the nose gear wheel well was open, both of these conditions offer considerable more drag to the airplane.

Q. Would that have an effect, in your opinion, on the acceleration and gaining altitude of the aircraft? [944]

A. It would have a direct bearing on the airplane's ability to accelerate and gain sufficient air-speed and altitude.

Q. In your opinion, could it cause the plane to sink into the water? A. It could have.

Q. Is there any evidence that the failure to gain altitude after clearing the obstruction at the end of the runway was due to any other cause?

A. There is no other evidence.

Mr. Koch: I have no further questions.

Q. (By Mr. Riley): Isn't the loss of an engine other evidence as to why the aircraft didn't remain airborne?

A. I assume the last question directed to me refers to the configuration that it was making a landing and go-around at Sandspit.

Q. Wouldn't too steep an angle of attack on three engines at low airspeed also impair the ability of the aircraft to maintain altitude and its air-speed?

A. I am not aware of that being evident.

Q. Wouldn't a bank to the left after takeoff

(Testimony of Paul H. Sanders.)

impair the ability of the aircraft to fly and reduce the effective lift from that which it would have in level flight?

A. Again, I am not giving a pilot's opinion. I would say no, [945] a steep bank probably, but obviously this close to the ground it isn't a steep bank.

Q. How far away from the aircraft was this nose wheel recovered?

A. It was picked up on the beach directly opposite the airplane, I'd say half a mile from the airplane.

Q. It floated in with the tide?

A. Either floated in with the tide or was rolled in on the bottom, one or the other.

Q. There was water between the aircraft at low tide and the shore, I presume?

A. At the time we recovered the nose gear?

Q. Yes. A. Yes.

Mr. Riley: I have no further questions.

Mr. Koch: No further questions.

The Court: You may step down.

(The witness was excused.)

FREDERICK D. CAMPBELL

called as a witness by the defendant, was sworn and testified as follows:

Direct Examination

Q. (By Mr. Koch): Will you state your full name and spell the last name, please? [946]

A. Frederick D. Campbell, C-a-m-p-b-e-l-l.

(Testimony of Frederick D. Campbell.)

Q. Are you a pilot? A. Yes.

Q. Where do you live? A. Bellevue.

Q. By whom are you employed?

A. Pan American Airways.

Q. Will you trace briefly your aviation experience?

A. I began flying aircraft in 1935 and went through the Army flying school in 1939 and 1940. I have been with Pan American Airways ever since, a total of 17 years with Pan American.

Q. What route are you flying now?

A. Seattle to Honolulu.

Q. Did you ever fly a northerly route from Seattle? A. Yes.

Q. What was that route?

A. Generally, Seattle to Fairbanks and Nome.

Q. Does that route that you normally fly bring you in the general vicinity of Sandspit?

A. At the time that I flew it that route did come very close to Sandspit, within about 50 or 60 nautical miles, I believe.

Q. Do you recall a flight that you made on January 18, 1952? A. I do.

Q. Where were you? Between what points were you flying? [947]

A. I was southbound from Fairbanks to Seattle.

The Court: What date was that?

The Witness: January 19th.

The Court: From Fairbanks to Seattle, did you say?

The Witness: Yes, sir.

(Testimony of Frederick D. Campbell.)

Q. At that time, did Pan American use the Civil Aeronautics Administration radio facilities?

A. Yes, they did.

Q. What frequency did you receive and transmit over?

A. I can't recall the—I believe it was 31. I can't say right now.

Q. Do you recall whether or not it was the same frequency as Northwest used at the time?

A. Yes, it was.

Q. Did you hear messages to and from Northwest Flight 324 of the 17th that was proceeding from Anchorage southbound on that occasion?

A. Yes, I did.

Q. Did you learn from your radio facility that Northwest Airlines Flight 324 of the 17th had feathered an engine in flight?

Mr. Riley: I object. Counsel is leading this witness.

The Court: Sustained.

Q. Was there anything during that flight that called your attention to the Northwest flight? [948]

A. Generally the flights from Fairbanks to Seattle——

The Court: Read the question.

(Last question read by reporter.)

The Court: Meaning Flight 324. Answer yes or no.

A. Yes, sir.

Q. What was that, do you recall?

A. I was about to say that the normal——

(Testimony of Frederick D. Campbell.)

The Court: We are not talking about “normally”. We are talking about what happened on this occasion.

The Witness: It was an attempt, sir, to explain how I would have the occasion to hear any messages from Northwest.

The Court: We do not care to have that explanation now. Just say what occurred.

The Witness: Yes, sir. I heard virtually all transmissions Northwest made at that time subsequent to the report on his part of having feathered an engine.

Q. Do you recall the general location of the Northwest flight when it sent that message?

A. I believe it was in the vicinity of an intersection southwest of Sitka. I am not familiar at this time with the name of that intersection, but I can point it out. It was on a chart.

Q. Do you recall what the weather was at Annette Island at the time you became aware of the feathering of the engine on the Northwest Flight 324? [949]

A. The weather as reported by the Air Traffic Control was below minimums. I couldn't say exactly.

Q. What minimums?

A. Below CAA minimums.

Q. Was there a message to that effect from the Annette radio operator to Flight 324?

Mr. Riley: Counsel is still leading the witness.

The Court: Sustained.

(Testimony of Frederick D. Campbell.)

Q. Do you have any recollection of such information being relayed by the Annette operator?

A. Immediately following the report by Northwest that they had feathered an engine, they were given weather reports and/or forecasts for the various fields that they might land.

Mr. Riley: I object. I don't believe he can answer what it was. It isn't responsive to the question, and he is referring to hearsay testimony.

The Court: It is sustained. The Court will disregard his last answer.

Mr. Koch: Would you read the question, please?

(Last question read by reporter.)

The Court: Answer yes or no.

A. Yes, sir.

Q. To whom was that information relayed, if you recall? A. To the Northwest aircraft.

Mr. Riley: He is calling for hearsay, I think.

The Court: The objection is overruled. He can say what the answer was to this question.

Q. Do you recall the question?

The Court: He has answered it. Read the answer.

(Last answer read by reporter.)

Q. Do you recall whether or not you yourself flew over Sandspit that night? A. Yes, sir.

Q. Why did you do so?

A. The ATC requested that I proceed to change frequencies to the range of its frequency at Sandspit, because they wanted to——

The Court: No. The reason why the Court said

(Testimony of Frederick D. Campbell.)

“No” is because you are bringing a lot of hearsay and statements that that question does not ask for, and even counsel asking the question may not care anything about those. Just answer directly. What was the result of somebody’s making some requirement of you, if it was? Tell what it was, and do not go into all this detail.

A. I was requested to go to the other frequency. I did.

Q. Why were you requested to do so, if you know?

A. Because they were unable to ascertain what had happened to the aircraft, I presume, and as such they wanted me to come over and search the area.

Q. Did you do that? [951]

A. Yes, I did.

The Court: What area?

The Witness: The area immediately adjacent or around Sandspit.

The Court: What were you searching for, things in the air or things on the ground?

The Witness: On the ground, presumably, although that wasn’t asked directly of me.

Q. In connection with your search over the area, did you fly across the airport?

A. Yes, I did.

Q. At what height?

A. I believe the first time over the airport was at roughly 200 feet.

(Testimony of Frederick D. Campbell.)

Q. What were you able to observe on the runway, if anything?

A. I saw tire tracks of aircraft, marks on the runway in the snow, appeared to be about three inches deep.

Q. About how deep?

A. Initially, the tracks were about three inches.

The Court: Do not say "initially", but tell him how deep it was, if you saw how deep it was.

A. I saw they were three inches, but they varied in depth.

Q. Where did you first observe these tracks on the runway?

A. About one-third of the way down the runway.

Q. Did you see any threshold lights on the runway? [952] A. No.

Q. Did you see any lead-in lights on the runway? A. No.

The Court: What do you understand by threshold lights, as compared to some other kind?

The Witness: Threshold lights are green lights at either end of the runway indicating the limits of the runway.

The Court: Does it indicate to you anything about permission to land or not to land on that runway?

The Witness: No, sir.

Q. What kind of lighting, if you recall, was on the runway? A. Flare pots.

Q. Where were they located?

(Testimony of Frederick D. Campbell.)

A. On either side of the runway.

Q. Do you recall anything about snowbanks or furrows?

A. I saw some snowbanks on each side, I couldn't say how high.

Q. Where in relation to the snowbanks were the flare pot lights?

A. They appeared to be inside of the snow furrows.

Q. Were they on the surface of the runway or——

A. They were on top of the snowbanks. I can't recall—I'd say that they appeared to be on top of the snow, but inside of the snowbanks, but I'm not sure of that.

Q. With respect to the aircraft marks which you observed on the field, could you tell whether it was a three-engine [953] or four-engine plane, what type of plane the marks came from?

A. I could tell it was a tricycle landing gear, with a nose wheel and two main gear, but I could never tell the number of engines from that.

Q. Will you describe as best as you can the snow tracks that you observed on the runway?

A. At the point one-third of the way down the runway, they appeared to be about three inches deep, the ruts made by the main gear and, for a time, the nose gear. As those marks continued to the end of the runway, or virtually to the end of the runway, they became, the depth became less until finally they disappeared completely.

(Testimony of Frederick D. Campbell.)

Q. Where did they disappear?

A. Practically at the end of the runway, very near it, as I could tell from my pass over the airport.

The Court: You mean so far as you could tell, is that what you mean?

The Witness: Yes, sir.

Q. From that observation, can you judge how far after the point of touchdown the tracks began to appear shallower?

A. It seemed almost immediately afterwards.

Q. Have you ever landed in snow?

A. Yes.

Q. Have you ever landed in a crosswind? [954]

A. Yes.

Q. In your opinion, if you had been the pilot of Flight 324 of the 17th, January 19, 1952, and had landed at Sandspit, British Columbia, slightly high and slightly fast, with the No. 1 engine feathered, at a ground temperature of 34 degrees, in a south-west crosswind, touching down one-third of the way down the runway 5,150 feet long and 150 feet wide, covered with three inches of snow, and with three foot high snowbanks on each side of the runway, which was lighted by flare pots on the surface of the snow inside the runways and which reduced the runway width inside the flare pots to approximately 135 feet, the runway having neither lead-in lights nor threshold lights, would you have tried to stop or attempt to take off again?

(Testimony of Frederick D. Campbell.)

A. I can't answer that, in view of the multitude of variables that did exist.

Q. Do you mean you don't know whether you would do one or the other?

A. I would have to be there and try it before I could answer that.

Q. What would be the considerations that would be in favor of attempting to stop?

A. Well, the remaining length of the runway, and there is a possibility that in the approach they might have had excessive speed or un-normal speed in the approach. That [955] would make part of the decision. Whether or not, if I had had power off in the approach for some period of time, so that I might possibly, immediately applying power to the remaining three engines, they may not take hold immediately and give me full power; or if I had had power on during the landing, where I felt a rapid increase of throttle would actually give me full power immediately. Also, the crosswind that existed.

Q. What effect might that have?

A. Well, we are assuming we have landed and whether or not we would take off, is that the point?

Q. Yes, whether you should try to stop.

A. The crosswind would—No. 1 engine out; the crosswind was from the right; there would be a drift. The tendency of the aircraft would be to weathercock to the right, and you wouldn't have the No. 1 engine to assist you in keeping it straight, so as to stop straight.

(Testimony of Frederick D. Campbell.)

The Court : If you had landed on an area and you could choose whether you would have a three inch snow on the runway or a strong crosswind hitting the plane as it landed; if you didn't have to have both of those conditions, which one would you choose to make it easier on the landing?

The Witness: The landing on three inches of snow without a crosswind would be easiest.

The Court: Easier than landing with a [956] crosswind without the snow, is that right?

The Witness: You said a strong crosswind. Yes, sir.

Q. How long a time would you have had to make up your mind which of these alternatives you would adopt? A. A very few seconds.

Q. In your opinion, is it a close question as to what you would do under the circumstances?

A. As I previously testified, I would say that all things the way they could have been, all one way or all the other, would make a very big difference.

Mr. Koch: I have no further questions.

Cross Examination

Q. (By Mr. Riley): In your approach you made to the field at 4 in the morning, was it still dark?

A. Yes, it was.

Q. And you went over the runway at 200 feet, I believe you testified. How fast were you going?

A. About 135 or 140 miles an hour.

(Testimony of Frederick D. Campbell.)

Q. Could you tell how high the snowbanks were on the edge of the runway? A. No.

Q. Then how in the world can you tell how deep the ruts were on the runway, going 135 miles down the runway at 200 feet? [957]

A. The snowbanks on either side varied, or shall we say rolled, from the rolling motion of the snow, rather than a sharp vertical line like the tires make, and it was my impression that they looked to be about three inches deep. If it had been much more than that, the axles might have made an additional mark on the snow, whereas in the banks on either side, because they varied with the ground level on either side of the runway——

Q. Was your——

Mr. Koch: May he finish his answer?

The Witness: I have nothing further.

Q. Was yours the aircraft that flew over to Annette to pick up Coast Guard personnel and supplies to bring them to Sandspit? A. No.

Q. Do you know whether or not that was done by other Pan American aircraft?

A. It wasn't done by Pan American aircraft.

Q. Do you know whether or not it was done at all? A. No, I don't.

Q. Do you know whether or not other aircraft assisted in the rescue?

The Court: Mr. Riley, you are inclined to do something which I do not know the cause of. Whatever it is, it is not helpful to you and it is not help-

(Testimony of Frederick D. Campbell.)

ful to the [958] witness and the Court. Try to speak distinctly and let the witness understand the question and let others understand it. There is something about your method of speech, or the rapidity of it, or all of the speech characteristics taken together as you employ them, that seems to interfere with the objective in mind. Proceed.

Mr. Riley: I will withdraw the question. Thank you, Your Honor. I have no further questions.

The Court: Is there anything else?

Mr. Koch: No, Your Honor.

The Court: Step down. Call the next witness.

(The witness was excused.)

DONALD L. LEONARD

called as a witness by the defendant, was sworn and testified as follows:

Direct Examination

Q. (By Mr. Karr): Will you state your full name for the record, please?

A. Donald L. Leonard.

Q. Where do you live?

A. At 16244 8th Avenue South, Seattle, Washington.

Q. What is your occupation?

A. Captain of Northwest Airlines. [959]

Q. How long have been connected with the aviation industry? A. Since 1941.

Q. What educational background did you have for your aviation work?

(Testimony of Donald L. Leonard.)

A. High school and college.

Q. What line of study did you pursue in college?

A. Aeronautical engineering.

Q. When you entered the aviation industry in 1941, in what capacity did you commence your work?

A. I started as a student in 1941 to learn to fly.

Q. You said you have been with Northwest Airlines since 1944?

A. I hadn't said that, but it is right.

Q. How long have you been a captain of Northwest Airlines?

A. About six years.

Q. Did you have some military experience in the field of aviation during the war?

A. I taught flying for two and a half to three years in the military.

Q. Approximately when was that?

A. In 1941, 1942 and 1943 early 1944.

Q. Since you became associated with Northwest Airlines in 1944, have you been regularly engaged in flying ever since?

A. Yes, sir.

Q. What types of aircraft have you flown?

A. For Northwest Airlines, I have flown [960] the DC-7, DC-6, Boeing 377, 1049, DC-4, DC-3, and I have flown many of the military—most of the military heavy bombers, some of the fighters, all their trainers, plus some jet aircraft such as the 707 and the T-33.

Q. Have you had experience in flying the route between Anchorage, Alaska, and Seattle, Washington?

A. Yes, sir.

(Testimony of Donald L. Leonard.)

Q. The route which the plane was flying at the time of the accident that is the subject of this case?

A. Yes, sir.

Q. One of those routes is overwater, the overwater route. There is another route over the land, I believe. Have you flown both of them?

A. Yes, I have.

Q. Have you ever been into the Sandspit airport in an airplane? A. Yes, sir.

Q. What is the Airline Pilots Association?

A. It is a professional organization comprised of airline pilots throughout the world.

Q. Do you occupy an official position in that organization?

A. Yes. I am the Regional Safety Engineering Chairman for this region.

Q. How long have you occupied that position?

A. About seven years.

Q. What are your responsibilities in connection with aircraft [961] as Regional Safety Engineering Chairman for ALPA?

A. I cooperate and coordinate procedures, airways, and all relevant safety matters with the Government agencies, including accident investigations and preparation for hearings, etc.

Q. As Regional Director, what does the region consist of which you direct?

A. The western states of Montana, Idaho, Oregon and Washington, with some assistance in Alaska and Hawaii.

(Testimony of Donald L. Leonard.)

Q. Are there other pilots who work with you as their director in this Regional Safety work?

A. Yes, sir.

Q. You referred to the aircraft accident investigations. Is that a part of your job as Regional Safety Director?

A. Yes, sir.

Q. Have you investigated aircraft accidents on more than one occasion during the last six or seven years you have occupied your present position?

A. Yes, sir.

Q. Could you give us a general idea of the extent or the number of aircraft accidents you have had occasion to study and investigate?

A. I never counted them. It's around 20 or 25, I would guess.

Q. Is your work limited to aircraft accidents of Northwest Airlines, or does it include accidents that occur to any [962] airline in your region?

A. It includes all airlines in my region.

Q. In connection with your investigation work, do you serve as a member of the investigating team?

A. Yes, sir.

Q. Are you called in investigating work solely by the Airline Pilots Association whom you serve as Regional Director, or are you sometimes called in by others?

A. I am sometimes called in by the Civil Aeronautics Board to assist them.

Q. You have participated in investigations at their instance, have you?

(Testimony of Donald L. Leonard.)

A. Yes, specifically for non scheduled air carriers where they have no technical representative in the pilot field. They will ask our help in the accident investigation.

Q. Have you also done consultation work on air safety and engineering matters?

Mr. Riley: Mr. Karr falls in the same practice of leading the witness as Mr. Koch does.

The Court: Avoid leading. It is not necessary. This man is too intelligent to lead.

Q. What if any consultation work have you done in air safety and engineering matters?

A. I have done some work with aircraft manufacturers and component manufacturers such as Boeing Aircraft, Douglas [963] Aircraft, Lockheed, Hamilton Standard.

Q. Did you have a part in the investigation of the Sandspit accident which is the subject of this lawsuit? A. Yes.

Q. Did you go to the scene of the accident?

A. Yes, I did.

Q. And about when did you arrive there?

A. About eight hours after the accident.

Q. That would be on the morning of January 19th, is that correct?

A. Approximately 9 A.M. in the morning.

Mr. Riley: I would like to ask if this witness went there at the request of the Civil Aeronautics Board, and if he did, I object to any testimony he might have, counsel having been able to keep out anything I tried to bring in from the CAB.

(Testimony of Donald L. Leonard.)

The Court: This man is a sworn witness and he can testify to what he saw on the ground. He may not be permitted over objection to testify to certain deductions or the results of studies, but he can testify as to what he saw, unless the time it was seen is too remote.

Mr. Riley: That is exactly what counsel has been able to keep me from showing. I have had documents and reports which it was felt were self-serving declarations of the company which were submitted to the CAB.

The Court: That is an act of something with the hand [964] or mind. What he says he saw with his own eyes is subject to your cross examination, and the Court is of the opinion that nothing has occurred to indicate the justification of any ruling upon his qualifications to testify or propriety of his doing so as to a given question. You may proceed. Ask him appropriate questions.

Q. I think you said you arrived on the morning of the 19th. About how many days were you at Sandspit on that occasion?

A. Approximately two weeks.

Q. Was your time during that entire two weeks devoted to investigation of this case?

A. Yes.

Q. Could you tell us in general what your activity was in that connection?

A. Well, of course, our first assignment arriving at the scene——

(Testimony of Donald L. Leonard.)

The Court: Not "our", your.

A. My first assignment on arriving at the scene as part of the investigating team was to first of all assure ourselves that the survivors were adequately taken care of and that we had recovered all the survivors, so we devoted a few hours to that endeavor.

Q. Did you interview survivors in the course of your work? A. Yes, sir.

Q. What else, in general, did you do? Whom did you interview, [965] just so we have a general picture of your activities?

A. We interviewed the radio operators on duty at Sandspit, the airport management, the people at the Department of Transport, Canadian Pacific Airline guest house that had the survivors in bed and had helped take care of them. We talked to the Department of Transport people that were part of our investigating team, just in general went on with our investigative work.

Q. Did your work either at Sandspit or subsequent thereto also include interviewing Northwest Airlines personnel who had some connection with the accident?

A. Yes. As part of our accident investigation, we had to go over the maintenance records, the crew training records, and the flight plan and the flight log and the radio reports, weather reports, etc.

Q. Did you check all those at one time or another as part of your work?

(Testimony of Donald L. Leonard.)

A. Yes, sir, I did.

Q. Did you also while you were at Sandspit on this occasion of ten days or two weeks after the accident have opportunity to examine the plane itself?

A. Yes.

Q. Did you do that on more than one occasion?

A. Yes.

Q. Were you actually aboard the plane in the course of that [966] investigation?

A. Yes, the first morning I arrived at the scene, the aircraft was partially out of the water. We could walk——

The Court: Ask him a question.

Q. On how many occasions were you aboard the plane during your investigation there in that two week period, just in general? A. Three times.

Q. Were efforts made to salvage the plane while you were there? A. Yes.

Q. Did you participate in that activity?

A. Yes.

Q. In connection with the CAB hearings in the case, did you appear as a witness at the hearing in Seattle? A. Yes, I did.

The Court: CAB hearing?

The Witness: Yes, sir.

Q. Did you return to Sandspit in June, 1952, for further investigation and check?

A. Yes, sir.

Q. About when did you do that?

(Testimony of Donald L. Leonard.)

A. We arrived there on June 8th.

Q. How long did you remain on that trip?

A. Three days.

Q. Was there subsequent consideration and investigation of [967] this accident by the CAB after your later study at Sandspit?

A. Yes, there was.

Q. Did that involve study by you or investigation by you of the nose gear assembly?

Mr. Riley: Counsel is leading the witness, if the Court please.

The Court: The objection is sustained.

Q. What if any study of the nose gear assembly did you make after your initial work?

Mr. Riley: I will object. Strike that.

The Court: You may proceed.

A. I had the nose gear air expressed to me from Sandspit here at Seattle, and we inspected it here in Seattle, then forwarded it to the Civil Aeronautics Board in Washington for further investigation.

Q. And after further investigation by the CAB, was there an additional hearing in St. Paul sometime in 1955?

A. Yes, sir.

Q. Did you also participate in that hearing?

A. I did.

Q. Let me direct your attention to the subject of briefing of military personnel who are to engage in an overseas flight. Are you familiar, in general, with the provisions of the contract between Northwest Airlines and the United States Govern-

(Testimony of Donald L. Leonard.)

ment on the matter of briefing personnel in [968] advance of flight? A. I am.

Q. Had you prior to this accident flown out of Haneda Airport, from which this flight originated, on more than one occasion? A. I had.

Q. Had you on any occasion observed the briefing procedures which the Government followed in advising military personnel in advance of such a flight, in conformity with the contract provision?

A. Yes, I had.

Q. Would you describe it to us?

A. I had not seen the entire briefing procedure, but we had to walk through the briefing room at both McChord Field and Haneda Airport in Tokyo on our way to the dispatch office, so the briefing was in progress. They would get the passengers in a room with a display of all of the emergency equipment. The life raft would be fully inflated with all its emergency provisions spread out around it such as emergency food, fishing kit, bailing basket, oars, canopies, etc., Gibson Girls, emergency radio, life vests, and the military would give a general briefing of this equipment, plus its usage, to the passengers.

Q. Was that procedure followed as a preliminary to each overseas flight of military personnel?

A. To the best of my knowledge, it was conducted before each [969] departure, yes, sir.

Q. Was similar procedure conducted by the military in Seattle for flights en route from this side over to——

(Testimony of Donald L. Leonard.)

Mr. Riley: Counsel is consistently leading this witness.

The Court: Sustained.

Q. Was there any difference in the procedure that you have described, Captain Leonard, in flights originating from Seattle to Japan?

A. The flights originated at McChord Field at Tacoma, and the procedures were precisely the same.

Mr. Riley: I think that is all irrelevant, unless counsel wants to offer some proof that he can contract away their obligation to brief these passengers themselves. The Civil Air Regulations are in evidence, and it is required by them in so many words to brief their own passengers. I think it is a well-established proposition in law that no person can contract to relieve himself of the duty imposed upon him by law, 38 Am. Jur., Negligence, and many cases cited thereunder. I am not admitting for a moment that these passengers were ever briefed, but it seems to me we are going far afield.

The Court: The Court is not getting that impression. What do you propose to prove that is material to this evidence, if it was done by the military? [970]

Mr. Karr: I propose to prove, your Honor, that the facilities for briefing were infinitely more elaborate and complete than they could have been to passengers on an airplane. I don't contend at all, as Mr. Riley suggests, that we tried to relieve ourselves of anything, but I am trying to explain the

(Testimony of Donald L. Leonard.)

type of instruction that the passengers we had were given before they got on our flight, and every flight, it being implied in Mr. Riley's case that we don't adequately inform them about the use of the equipment. I am trying to show they were informed much more fully than we could have undertaken to inform them. May I proceed, your Honor?

The Court: You may.

Q. Would you compare, if you can, the extent of the briefing that was provided by the military as you observed it at Haneda Airport, with the type of instruction which the stewardess gave?

The Court: Are you going to show that that type of instruction was given to them in this particular instance?

Mr. Karr: I cannot show it in this instance. I can only show the regularity of the procedure.

Mr. Riley: If they can't show it was done in this case, I can't see what all this other has to do with it.

The Court: The objection is sustained.

Q. May I direct your attention to the subject of oil coolers. [971] Have you ever experienced a broken oil cooler in flight? A. Yes, I have.

Q. What did you do when that occurred?

A. We feathered the engine.

Q. Is that matter of a broken oil cooler or oil cooler assembly something which you as a pilot flying a DC-4 can see from the pilot's cabin?

A. Yes, sir.

Q. In the experience you have referred to, where

(Testimony of Donald L. Leonard.)

you had that experience, did you so diagnose it while you were in flight? A. That is right.

Q. And was your diagnosis proved to be correct when you landed? A. It was correct.

Q. Is the matter of an oil cooler failure, the type we are talking about, a particularly uncommon experience in the aviation industry?

A. No.

Mr. Riley: I think counsel is still leading the witness.

The Court: Sustained.

Q. Would you state whether or not that is a common or an uncommon experience in the aviation industry?

A. It is quite a common occurrence, especially in the cold climates such as the northern regions that some of the airlines operate.

Q. What does the temperature have to do with the occurrence? [972]

A. It congeals the oil, makes it heavier, and the high pressure under which it operates has a tendency to induce ruptures in the core itself. Also, the ice breaking off of the props, or slush and ice coming off the gear somewhere, will have a tendency to do damage to the front of the oil cooler core itself, physical damage.

Q. Would you say that it is or is not possible to differentiate when you are flying the plane between a leak caused by a break in the oil cooler assembly, as distinguished from a leak from the engine?

(Testimony of Donald L. Leonard.)

A. I believe it is quite easy to distinguish between them.

Q. Can you tell us how?

A. The oil cooler assembly hangs well forward on the engine, while directly beneath it—it is completely enclosed in its own housing and shell, so that it is isolated from the rest of the power package; and an oil leak up in the engine in flight, the air flowing through the engine will drag the oil back to the back of the engine or over the top of the wing, or down through the oil drain line towards the back of the nacelle; where an oil cooler failure, in the oil cooler assembly area, will flow out around its own housing.

Q. When one is in flight at night, would one be able to determine a break in the oil cooler assembly, would you say?

A. Yes, sir. We have very adequate light available to us [973] to inspect the entire engine and oil cooler assembly.

Q. What type of lighting is that with reference to a DC-4?

A. We are required to carry individual flashlights, plus the wing lights that can illuminate the entire top surface, leading edge, of the wing, plus an Aldis lamp that is a very intense bright light.

Q. All of those facilities are available, then, for inspection of a break of this kind, are they?

A. Yes. Actually, any one of the three generally will be adequate to ascertain the problem.

Q. May I direct your attention to the subject

(Testimony of Donald L. Leonard.)

of the airport at Annette on the night of the accident. In the course of your investigation, have you determined whether or not it was reported to Captain Pfaffinger that Annette was below minimums as he was flying southbound?

Mr. Riley: That question is leading, calls for a hearsay answer.

The Court: The objection is sustained. You should ask him did he have information about it, and if so, what it was.

Q. Did you in the course of your investigation learn what the condition of the Annette airport was as Captain Pfaffinger was southbound with reference to whether or not it was above or below minimums? A. Yes. [974]

Mr. Riley: I think it is still leading.

The Court: The objection is overruled.

Mr. Riley: I believe it still calls for a hearsay conclusion.

The Court: I am not so certain about that.

Mr. Karr: I haven't asked what he determined. I asked him if he did determine it.

The Court: The Court has not ruled anything out yet. That was the last question?

Mr. Karr: Yes, your Honor.

The Court: You may proceed.

Q. Do you know what the question was?

The Court: Read the question.

(Last question read by reporter.)

A. Yes, sir.

Q. What did you learn about that in your in-

(Testimony of Donald L. Leonard.)

vestigation? A. That the weather was——

Mr. Riley: If the Court please——

The Court: Just the results of it, please.

A. That the weather was below minimums at Annette. Is that brief enough, sir?

The Court: That is sufficient.

Mr. Riley: It seems to me that should be stricken. He wasn't there. He discovered it from someone else, and he is reporting the conversation with someone else. [975]

The Court: The objection is overruled.

Q. By minimums, what do we refer to in the aviation industry?

A. The landing or takeoff minimums of Civil Air Regulations, or a law to the pilot under which he can operate.

Q. What specifically do we refer to as minimums? Minimum of what?

A. Minimum ceiling and visibility.

Q. Ceiling has reference to what?

A. The height of the base of the clouds above the ground.

Q. And visibility?

A. Is the horizontal distance that you can discern an object.

Q. When the conditions at an airport are reported to a pilot as below minimums, was it permissible under NWA procedures for him to have attempted a landing at Annette? A. No, sir.

Q. Would it have been permissible with the conditions reported to him at Annette as below mini-

(Testimony of Donald L. Leonard.)

mums, would it have been permissible under CAA procedures for him to have attempted a landing at Annette? A. No, sir.

Q. What would have been the consequences had he done so in violation of both NWA and CAA procedures?

The Court: If you know.

A. The consequences generally would be the revocation of his pilot's license. [976]

Q. May I direct your attention to the safety equipment or crash and firefighting equipment at the two airports, Annette and Sandspit. Are you in general familiar with the equipment at both such airports? A. Yes, I am.

Q. What if any crash or firefighting equipment was there at Annette Island on January 19, 1952?

A. None.

Q. What if any crash and firefighting equipment was there at Sandspit at that time?

A. None.

Q. With reference to Coast Guard facilities, was there a Coast Guard facility in the vicinity of Annette Island? A. Yes, there was.

Q. What equipment did it have?

A. The equipment consisted of two approximately 18 foot rowboats and two amphibian-type aircraft.

Q. Where was this Coast Guard station located with reference to the airport?

A. Approximately four or five miles from the airport.

(Testimony of Donald L. Leonard.)

Q. And were the rowboats you have referred to at the Coast Guard station these four or five miles from the airport? A. Yes, sir.

Q. Referring to the amphibian equipment, I think you said there were two amphibian aircraft at the Coast Guard station? [977] A. Yes.

Q. Do you know whether those aircraft were usable for night work?

A. No, they were restricted to daylight, visual flight rules only.

Q. On a night such as the one when this accident occurred, was aircraft operation possible on visual flight rules even if they had not been restricted to daytime operation? A. No, sir.

Q. Assume that both airports, Annette and Sandspit, were above minimums—that isn't the evidence as to Annette, but I ask you to assume for the purpose of this question that the landing conditions at Annette were above minimums; take into account the safety and rescue equipment which existed at both airports; suppose that you were flying on instruments at night with one engine feathered, as Captain Pfaffinger was; and that you were roughly equidistant from Annette and Sandspit: which is the more suitable airport to select for a landing, taking into account all those considerations? A. I would say Sandspit.

Q. Why?

A. Because of the approach procedure to the airport, the final approach pattern and the missed approach procedure.

(Testimony of Donald L. Leonard.)

Q. In what respect do you consider Annette inferior? [978]

A. Annette has some hills approximately 3,000 feet high within about three miles of the airport, just about three miles from the airport, and they constitute quite a hazard under wind conditions. It gets very turbulent there, and these hills have been a constant source of headache to air travel through the Annette area.

The Court: The Court will be at recess ten minutes.

(Recess.)

The Court: You may resume the interrogation.

Q. In the course of your period at Sandspit immediately following the accident, did you have an opportunity both to examine the airport there and inform yourself as to its condition?

A. Yes, sir, I did.

Q. What would you say as to whether the landing conditions at Sandspit on the date of this accident were or were not normal for landing conditions at that time of year and that sort of territory?

A. I would say they were normal.

Q. May I direct your attention to the matter of emergencies. Is there a distinction between an actual emergency, as that term is used in airplane flight, and a potential emergency?

A. Yes, there is.

Q. Can you explain that for us? [979]

A. An actual emergency is when you are in serious trouble and must do something immediately,

(Testimony of Donald L. Leonard.)

that you are on fire or have lost more than two engines or something is very structurally wrong with the airplane. A potential emergency is when you have some malfunction that, combined with something else additional, could put you in that condition.

Q. By "that condition," you mean what?

A. In the emergency condition.

Q. In what category does three-engine operation fall as between potential emergency and actual emergency?

A. It is a potential emergency.

Q. What if any training is a pilot given in three-engine operation with Northwest Airlines?

A. He is given extensive training during his original training periods. Then every six months during his proficiency check ride by CAA check pilots, he must demonstrate his ability to adequately operate the airplane on both three and two engines.

Q. You say those checks come how frequently?

A. Every six months.

Q. Is the occurrence of three-engine operation a particularly unusual one or not, in airline operation?

A. No, it is a daily operation, I'd say, in the airline industry.

The Court: Did the pilot of this plane survive the [980] accident?

The Witness: No, sir.

The Court: You are like the rest of us, then. You have no knowledge from any record he made

(Testimony of Donald L. Leonard.)

or from any statement he made as to what his problems were at the time of his landing? You have nothing from him that reflects what was in his mind as to his conception of the problem that he was working with when he was attempting the landing?

The Witness: No, sir, we don't.

Q. Was it the practice, Captain Leonard, in the airline to notify the passengers when you simply had a potential emergency in flight?

A. No, it wasn't.

Q. Under CAA procedures, was the pilot required to notify the passengers of a potential emergency? A. No, sir.

Q. Under such CAA procedures, was it even recommended by the CAA that the passengers be notified of a potential emergency? A. No, sir.

Q. Now, with reference to the use of this word emergency, I would like to call your attention to an airport chart of the Sandspit airport, Plaintiffs' Exhibit 31. Are you familiar with that chart? [981] A. Yes, sir.

Q. You have seen that chart before, haven't you? A. Yes, I have.

Q. What does the word "emergency" on an airport chart as appears on Plaintiffs' Exhibit 31 indicate?

A. It is merely a classification of that airport for the type of—we have different classifications of an airport, and this is just a classification, one of the classifications.

(Testimony of Donald L. Leonard.)

The Court: What is it you call that Plaintiffs' Exhibit 31?

The Witness: This is a range procedure chart.

The Court: What is the entire thing?

The Witness: It is copies from Northwest Airlines Operations Manual.

The Court: Is it a compiled flight manual purportedly used by Northwest Airlines?

The Witness: It is part of it, yes, sir.

The Court: It is part of a manual, is that right?

The Witness: Yes, sir.

Q. We have been talking about emergency and potential emergency experienced in flight. Does the use of the word "emergency" on the chart that we have been referring to, where there is an airport illustrated, have any relationship to the use of emergency and potential [982] emergency as describing certain characteristics encountered in flight? A. No, none whatever.

Q. Does the word "emergency" on an airport chart of the type we have referred to showing Sandspit have any relationship to the character of a flight, or the experiences in flight that are encountered, that can land at that airport?

A. No, they do not.

Q. The words are used entirely differently, is that correct?

A. It is merely an unfortunate classification of an airport.

The Court: To what, specifically, did your last answer refer?

(Testimony of Donald L. Leonard.)

The Witness: The word "emergency," sir.

The Court: It doesn't mean anything to you, is that what you mean?

The Witness: No. It merely means to me some other airport than our normal terminals, alternates, provisionals, or refueling. That could just as well be "all others" on there as "emergency."

Q. Referring to the subject of lifesaving equipment, are you familiar with the type of life vests that were installed on the DC-4 airplanes operated by Northwest Airlines? A. Yes, sir.

Q. Where were they located? [983]

A. Normally in the overhead hat rack.

Q. By "normally," what do you have reference to? Were there some occasions when they weren't?

A. There was some configurations where there was no hat rack above some seats, aft of the main cabin door, so they were put on the side wall.

Q. Can you tell us whether that means a couple of seats, or four seats, or are we talking about a major part of the airplane?

A. Generally only one or two seats, double seats, that is.

Q. With the TWA DC-4, where were the life vests located? A. Overhead in the hat rack.

Q. Same hat racks as in the NWA plane, same location of—— A. Yes, sir.

Q. Are you familiar with where the life rafts were located in the two types of DC-4, that is, the kind owned and operated by Northwest Airlines as distinguished from the type Northwest Airlines

(Testimony of Donald L. Leonard.)

rented from TWA? A. Yes, sir.

Q. Where were the life rafts located on the Northwest Airlines owned planes?

A. Usually were mounted directly forward of the main cabin door and directly adjacent to it. However, there were some exceptions to that where they were mounted just aft of the main cabin door and adjacent to it. This was merely [984] the width of the door that would separate the location of the cabinet, approximately three feet. There was spots on the floor, tie-down holes in the floor where they could be fastened, just a matter of turning the cabinet around so it would face the door in all cases.

Q. What if any difference was there in the cabinets that contained the life rafts in the Northwest Airlines planes as distinguished from the TWA chartered planes?

A. As best I could tell, they were identical.

Q. What if any instruction was given to Northwest Airlines pilots on both the location and the use of life rafts?

A. There was a very complete instruction given to all crew members, including the pilots, when you first were assigned to overseas duty. Then there was a recurring training every six months. You were required to go in and put in a full day in training session. One of these sessions would be classroom drill. We would have a raft inflated, along with the emergency equipment from the raft, life vests, emergency radios, all out on the floor

(Testimony of Donald L. Leonard.)

of the classroom, and all crew members had to participate in demonstrating the use of them and in showing their knowledge of these components. Usually there was some movies or other drills given in the classroom, along with a test.

The other six months drill was what we call a wet drill. We would go out to a lake near the airport and [985] actually take the life vests and life rafts and inflate them in the water, and would utilize all of the emergency equipment on the raft to show that we knew how it functioned and what it was for, and that we could remain up to date with it.

Q. Was that type of regular training every so many months given to pilots only, or to whom else in the airline organization was it given?

A. Given to all crew members, pilots, co-pilots, flight engineers, navigators, stewardesses, pursers, flight service attendants, etc.

Q. Did each of these various members of the crew have this type of instruction with the same frequency, every six months?

A. Yes, they are required by company regulation to have this every six months, or they are not qualified to fly on overseas trips.

Q. Apart from the matter of instruction on use of such equipment at these regular instruction periods, what if any attention was a pilot required to pay to the location of such equipment in a plane when he flew it?

Mr. Riley: I object, your Honor. He is consist-

(Testimony of Donald L. Leonard.)
ently leading the witness. The material is entirely irrelevant, anyway. It hasn't been shown to relate in the least bit to this aircraft. This man hasn't stated he trained this crew. He is resorting to irrelevant hearsay he has [986] gathered on behalf of the company. I can't see it is serving any worthwhile purpose.

The Court: Is there any response?

Mr. Karr: We are entitled to show what training and what procedures are followed in connection with the use, the location and the knowledge of lifesaving equipment. I am proposing to show through Captain Leonard, an experienced pilot, just what procedure a pilot follows, by requirement, each time he boards a plane as a crew captain, regular company procedure.

The Court: You may do that. You may or may not profit thereby, but connect it up with what was done in this case. Proceed.

Q. Can you tell us the procedure in that connection?

A. Yes, sir. When the crew reports to the airplane, they report at least twenty minutes prior to the boarding of the passengers or scheduled departure time. The captain then organizes his entire crew at the aircraft and runs a physical and oral quiz with all his crew members so that he is sure that they all know the emergency equipment on board the airplane, its proper location, how to use it, they all know their designated stations in different types of emergency, that they all have

(Testimony of Donald L. Leonard.)

checked the equipment which they are assigned to make sure it has been overhauled within its time limits, and runs a general [987] emergency drill to familiarize all of his crew with his own emergency procedures.

Q. What is that procedure or practice called?

A. It is called a briefing.

Q. And with what frequency is that done?

A. It is done prior to the departure of the crew for each trip.

Q. Now, you said that they checked the equipment to see whether it was within limits, I think was your reference. What do you mean by that?

A. Each life vest and life raft is required to be overhauled and reinspected periodically, so we checked the cards on the equipment to make sure it is within its proper periodic inspection time.

Q. Does that checking occur either by the pilot or someone else under his direction before each departure?

A. Yes, sir.

The Court: By that, you mean it is supposed to be, do you not?

The Witness: No, sir. I mean it is done.

The Court: How do you know?

The Witness: A captain gets on the airplane with his crew. The crew members are there with him. He asks them, "Where is the life raft?" The crew member must go to the life raft and show him where it is. He asks them, "What is the date on it?" [988]

The Court: How does the president of the com-

(Testimony of Donald L. Leonard.)

pany know if you will do that? Someone might overlook it sometime, might he not?

The Witness: Yes, they might. They could overlook anything, I suppose, sir.

The Court: You may proceed.

Q. With reference specifically to the life rafts on this plane, did you see them at any time during the period of ten days or two weeks you were at Sandspit following the accident?

A. Yes, I did.

Q. Tell us when and where you saw them, as nearly as you recall.

A. There were three life rafts on board. The ten-man raft was partially protruding from the cockpit window. Another part of it was protruding from the astrodome and was secured some way to the inside, was shackled so you couldn't pull it out. The two twenty-man rafts were recovered subsequent to the accident on the beach.

Q. How long after the accident, do you recall?

A. I believe it would be recovered, the first one, on Monday following the accident, two days following the accident; and the other one, I believe, was the following day.

Q. How did they reach the beach, by the way?

A. They floated in on the tide.

Q. At the time they floated in to the beach on Monday and [989] Tuesday following the accident, had the cabin portion of the plane disintegrated to any appreciable extent at that time?

A. Not that I could tell, no, sir.

(Testimony of Donald L. Leonard.)

Q. When they were recovered on the beach, were they or were they not inflated?

A. They were not inflated. They were intact in the original stowage packages.

Q. Was examination made to see whether they would inflate?

A. One of them was inflated upon its return to the States. The other one, I don't know what its disposition was.

Q. There was some testimony, I believe it was this morning, with reference to the problem, if it is a problem, of landing an airplane with a frozen rudder tab. Would you be able to comment on whether or not a frozen rudder tab would make it harder or easier to land the airplane?

A. I would say it would make the landing easier.

Q. Why would that be?

A. When you are normally flying on three engines, you apply a rudder tab correction to trim the airplane out so it will fly hands off. Your reason for this is because of your unbalanced power. As you reduce your power to symmetric power again for your landing, you must re-trim the airplane for symmetric power, and if your rudder tab was frozen in neutral position for landing, you wouldn't have to make [990] this additional rudder tab correction.

Q. There has been testimony in the last day or two about the plane approaching the airport at Sandspit, being, let's say, a mile from the airport at an altitude of 800 feet, more or less, and the speed

(Testimony of Donald L. Leonard.)

of descent which might then be necessary to come into the airport and make the landing. Can you comment on that subject?

A. In this specific case, they had ten miles visibility, so I don't believe it was a problem.

Mr. Riley: There is no such evidence in the record, that there was ten miles visibility.

Mr. Karr: May we see Plaintiffs' Exhibit 6, your Honor?

Mr. Koch: A-5 and 6, I believe it is. We need the exhibit, the flight accident report of Smith. It was a defendant's exhibit, but was introduced by the plaintiff, a multigraphed, two-page exhibit.

Mr. Riley: It wasn't introduced by the plaintiff. It was introduced over plaintiffs' objection, on cross examination of Mr. Smith by Mr. Koch.

The Court: What number do you think it is?

Mr. Riley: A-5 is the position log.

Mr. Koch: I think it is A-18, your Honor.

The Court: What do you call that exhibit, Mr. Koch, a one-word name?

Mr. Koch: Accident report. [991]

Mr. Karr: Can Exhibit A-18 be shown to the witness?

The Court: It will be shown to the witness.

Mr. Riley: Could I see that?

The Court: Yes.

Mr. Riley: I'm sorry, your Honor. There seems to be a difference in the two copies I have than the one here.

The Court: What are you looking at?

(Testimony of Donald L. Leonard.)

Mr. Riley: This is a copy of Mr. Smith's report I obtained from the CAB.

The Court: It is not in the record, is it, that thing you hold in your hand?

Mr. Riley: No, your Honor.

The Court: Proceed. What does the clerk's record show with respect to Defendant's Exhibit A-17 as to admission of it?

The Clerk: That has not been admitted, your Honor.

Mr. Karr: Shall I proceed, your Honor?

The Court: You may do that. I wish you would expedite it, bearing in mind the estimated time.

Mr. Karr: I will do my best.

Q. You have just been handed Defendant's Exhibit A-18. At the top of the second page of that exhibit, is there material there from which you can tell what the visibility was at Sandspit?

A. Yes, there is. [992]

Q. What does it indicate that visibility was?

A. Ten miles visibility.

The Court: That is shown on that accident report, is it?

The Witness: Yes, sir.

The Court: Which is Defendant's Exhibit A-18. At the top of the second sheet of paper, which is the sheet on which the one making and signing the report, Mr. C. E. Smith, is purported to have signed it—have you copies of that?

Mr. Karr: No, your Honor.

(Testimony of Donald L. Leonard.)

The Court: I ask the witness to read the entire second line.

The Witness: It reads, "Sandspit, at 190930 Zebra"—that means the 19th day of the month, at 0930 Zebra or 0130 Pacific Standard Time—"E" means estimated——

The Court: Read it literally. Then go back and explain it.

The Witness: "E 25 OVC 10 974 34/30 SSW 10 944 ST 10".

The Court: 10? To what subject does that refer, if you know?

The Witness: That refers to a stratus deck at 1,000 feet. "Brks" is the last.

The Court: Will you point out the figures which [993] relate to the visibility, the distance one's eyes could see without serious obstruction in the atmosphere?

The Witness: Yes, your Honor. After the letters "OVC", the numbers "10" signify the visibility at that station.

The Court: "10", is it?

The Witness: Ten miles.

The Court: You may inquire.

Mr. Koch: May we have Plaintiffs' Exhibit 38?

The Court: That is referred to heretofore as the flight superintendent's log, a copy. You may proceed.

Mr. Karr: I don't intend to ask about that exhibit at this time.

Q. With the aid of the information which you

(Testimony of Donald L. Leonard.)

have received as to the ten miles visibility at Sandspit, would you now proceed to tell us what you were going to about an approach to the airport from one mile out when you were at an altitude of 800 feet?

The Court: When did this occur?

Mr. Karr: This relates to testimony which was given, I believe, either——

The Court: By this witness?

Mr. Karr: No, by a prior witness, by Captain Cox.

The Court: Why are you entitled to have him comment on Captain Cox' testimony? [994]

Mr. Karr: I am not having him comment on that testimony. I would like him to explain the approach to the airport if one is at an altitude of 800 feet, one mile out, whether it is a direct or indirect approach, and to explain——

The Court: It might be that two different pilots might work out the problem in different ways. Proceed.

Q. Could you explain that?

A. Yes. With the situation you are speaking of, one mile out with 800 feet, like your Honor says, it could be worked out any way with different pilots, but it isn't a bit unusual for a final approach to an airport, in the last one mile, to descend at rates up to 2,000 feet per minute before your last flareout, or you have ways of making your turn in or an S turn to the airport. There is many different ways you

(Testimony of Donald L. Leonard.)

could lose this altitude without any undue operational problems.

Q. When you say an S turn, what do you mean by that?

A. Rather than proceeding straight from your one point to the end of the runway, you could do it in a series of gentle turns.

The Court: Before you touched the runway?

The Witness: Yes, before you get to the last thousand feet from the airport, is all you are required to remain straight and level. [995]

Q. Depending on the extent to which you made an S turn or curved in approaching the airport, your rate of descent would be decreased, would it?

A. Yes, sir.

Q. Referring to, more specifically, your return to Sandspit in June of 1952, I would like you to direct your attention to that event. I think you said you were there from June 8th to June 10th, or thereabouts?

A. Yes, sir.

Q. Were you present in January of 1952 at the time salvage activity was undertaken in connection with the airplane?

A. I was.

Q. What was done with a view to trying to salvage the plane, in general?

A. We hooked onto it with some fishing boats, attempted to tow it to a beaching site.

Q. What success was had in the effort to tow the plane from the place where it was at rest in the water?

A. We towed on it for approximately six hours

(Testimony of Donald L. Leonard.)

in three different directions; yet we didn't move the airplane, I believe, 100 feet in the total of the three directions.

Q. Were further efforts made to move the plane after these first efforts were abandoned, to tow it at any other time? A. No, sir.

Q. In moving it the 100 feet, more or less, that you referred [996] to, was it moved closer to shore or away from shore or what would the situation be in that respect?

A. I would guess, at the best, parallel to the closest shore line.

Q. In other words, was it closer to shore after the towing or farther or approximately the same?

A. Approximately the same distance.

Q. What was the general character of the beach?

A. The beach was very rocky, rough, pitted with large holes and large boulders, some the size of a two-story house.

The Court: Was that condition known to you before you went there and looked at it?

The Witness: No, sir.

The Court: It wasn't known to you from any records you had studied in your experience as a pilot?

The Witness: No, sir.

Q. What was the general position of the plane when salvage attempts were abandoned in January, 1952, with reference to the shore?

A. It was generally pointed in a northwesterly

(Testimony of Donald L. Leonard.)

direction. I mean, the tail of the airplane was pointed in a northwesterly direction, approximately half a mile off shore.

Q. When you returned in June of 1952, in what position was the plane?

A. It appeared to be exactly the same location, and facing [997] the same direction.

Q. Could you tell us what the weight of the plane would be, approximately?

A. When it took off at Anchorage, it weighed roughly 69,000 pounds, and had burned off roughly 2,000 pounds of fuel, so probably around 67,000 pounds, with the water.

Q. Would its being in the water result in the plane being heavier or lighter?

A. Undoubtedly make it heavier, with the water replacing the fuel, and with the water soaking all the interior of the airplane, such as the rugs and seats and the upholstery, it would undoubtedly make it heavier.

The Court: Did you conclude that the fuel space had been replaced with water?

The Witness: Yes, there was extensive fuel in the water throughout the duration——

The Court: How do you know it was replaced by water? Did you look into the fuel tanks?

The Witness: No. That is just the normal sequence, your Honor, that the water is heavier than fuel, so wherever it can get in or gasoline can get out, the water will replace it. It is roughly two pounds heavier per gallon than your fuel is.

(Testimony of Donald L. Leonard.)

Q. What sort of a beach or bottom area was the plane resting on, Captain? By that, I mean was it sandy, rocky, or—— [998]

A. It was gravel, all gravel. The entire run-off area of the tide was all gravel, rocks, sand.

Q. Where the plane was situated when you returned in June, was it sitting on top the sand, or was it buried to some extent?

A. The inboard engine nacelles were buried to the bottom skin of the wing, and the bottom of the airplane was disintegrated and gone. Otherwise, the bottom surface of the wing was resting on the top of sand and rocks.

Q. To what extent were the nacelles buried?

A. Approximately 18 inches, the tip of the nacelles.

Q. Were you out to the plane when you were at Sandspit in June, 1952? A. I was.

Q. On more than one occasion? A. Yes.

Q. How did you get out to the plane?

A. We walked out to it.

Q. You mean it was out of the water?

A. Yes, sir.

The Court: When did you do this?

The Witness: The morning of June 9th.

Q. Was the entire plane out of water at that time?

A. What was remaining of the airplane was out of water. There was a large puddle of water roughly fifty feet in diameter, [999] and I imagine two or two and a half feet deep. There were large

(Testimony of Donald L. Leonard.)

depressions in this run-off area there from the cockpit area, and the top section of the airplane was lying in this pool.

Q. I mean so far as the edge of the water is concerned, the tidal edge, was that beyond the plane or where?

A. Yes, sir. The tidal edge, as best we could ascertain, would be about 75 feet from the center of the airplane.

Q. That is when you were there in June?

A. Yes, sir.

Q. In connection with the various steps you have taken in the investigation of this accident, have you devoted attention, among other things, to the study of the nosewheel assembly? A. Yes, sir.

Q. What was the purpose of your return in June, 1952?

A. Our primary cause for the return was to make a study—make some recommendations to several of the stations along the route regarding communication procedures, and we also made the trip to the aircraft wreckage site at the same time.

Q. In the course of your studies and investigation of this accident, apart from studying the nosewheel assembly, did you also check on the nosewheel well and the doors of that well?

A. Yes. During the original examination of the airplane the first morning I arrived at the scene, we noticed that the [1000] left front nosewheel door was buckled and bent out. That was the only ab-

(Testimony of Donald L. Leonard.)

normal configuration with the nose at that time we noticed.

Q. So that we will have it in the record, what do you mean by nosewheel well?

A. The nosewheel well is a narrow opening in the nose of the airplane that the nosewheel fits up into as it retracts, and the nose gear doors close in behind it and completely enclose it.

Q. Can you tell us approximately what size those doors are?

A. About eight feet long, about 14 or 16 inches wide.

Q. How many of them are there?

A. Two, one on each side that close together.

Q. From your investigation of the accident, your study of the plane and the other investigation you have made of this accident, have you been able to reach a conclusion, in your judgment, as to the possible or probable cause of the plane going into the water?

A. Yes, sir.

Q. What is that conclusion?

A. We determined from the——

The Court: Just say what your opinion is, without any explanation at all. Just state it.

A. The inability to completely retract the nose gear, causing it to extend into the slipstream, plus the doors bent in [1001] the slipstream, caused enough increased drag on the airplane that he was unable to fly it.

Q. Would you explain for the benefit of all of

(Testimony of Donald L. Leonard.)

us, Captain, what facts you found which led you to that conclusion?

A. The marks on the nose gear strut; the way the up latch was torn from its assembly mountings; the subsequent experiences we had with nose gears and retraction problems of them in cold weather conditions, led to this further investigation that proved the facts we brought out.

Q. Was the matter of the nose gear failing to fully retract a matter of maintenance in the operation of airplanes by Northwest Airlines, or was that a matter or design in the initial construction of the nose gear?

A. It was a matter of design.

Q. Was that design subsequently changed by Douglas Aircraft Company?

A. Yes, sir.

Mr. Karr: May I have a moment to confer, your Honor?

The Court: You may.

Mr. Karr: You may examine.

Cross Examination

Q. (By Mr. Riley): As a matter of fact, isn't the real reason this airplane crashed and was unable to get into the air the fact that [1002] the No. 1 engine was dead?

A. No, sir.

Q. As a pilot, and I am a pilot and you are a pilot, are you sitting there and testifying that this airplane can take off as well on three engines as it can on four engines?

Mr. Karr: I object to the question in which counsel announces his talents in the aviation field.

(Testimony of Donald L. Leonard.)

The Court: The objection is overruled. I understood he was stating, in effect, a supposititious question.

Mr. Riley: May I redraft it?

The Court: Strike the question.

Q. Is it your opinion, Captain, that a Douglas DC-4 can take off on three engines just as well as it can, and in the same runway space, on three engines as it can on four? A. No, sir.

Q. You testified that the absence of the rudder tab—a frozen rudder tab would make a landing on three engines easier? A. Yes, sir, I did.

Q. Are you going to state that would make it easier on a wave off?

A. It wouldn't make much difference on the wave off, on the original wave off.

Q. As a matter of fact, the loss of the No. 1 engine in a Douglas DC-4 is the most critical of all four engines, [1003] isn't that a fact?

A. There is very little difference.

The Court: As I have suggested before, try to have in mind that if you wish to ask a question, every word in it is important to be heard by everyone.

Mr. Riley: Thank you, your Honor. It is easy to get exercised.

The Court: That is a bad thing to do. It always defeats the one who does it.

(Copy, Normal Operating Procedures, marked Plaintiffs' Exhibit 39 for identification.)

(Testimony of Donald L. Leonard.)

Mr. Riley: Could the witness see Plaintiffs' Exhibit 29?

The Court: Has opposing counsel seen this?

Mr. Riley: No, your Honor.

The Court: Let it be shown to opposing counsel.

Mr. Karr: Your Honor, the paper which counsel has asked be shown to the witness, I understand is not an exhibit in the case. I think it has been offered, but rejected.

The Court: I understood it had not been admitted. I understand the exhibit under study is the one which the Court now holds in hand, and that is Plaintiffs' Exhibit 39 for identification. It has not been received in evidence. I ask if counsel are aware of the identity of this exhibit. [1004]

Mr. Karr: We know in general of the contents, what it contains.

The Court: Have you seen it?

Mr. Karr: Yes, we have.

Mr. Koch: A different copy of this marked exhibit has been rejected already in this case. This is a different copy that is being re-marked.

The Court: There is no need of it, unless you have some——

Mr. Riley: That is true, the defendant's copy of that document was previously rejected, and I wanted to use them.

The Court: What one corresponds to that?

Mr. Riley: It was previously offered as Plaintiffs' Exhibit 34.

The Court: It has been called Northwest Air-

(Testimony of Donald L. Leonard.)

lines manual. Why can you not use the copy you used there which was rejected, if you wish to ask this witness some questions in further authentication.

Mr. Riley: I called for it this morning. It isn't here. It was from defendant's records.

The Court: Exhibit 34, as I understand it, cannot be located.

The Clerk: I have it here, your Honor.

The Court: Let me see both exhibits. The Court [1005] directs that what has been marked Plaintiffs' Exhibit 39 for identification be withdrawn and returned to counsel who produced it, and the Court refers to examining counsel for his use Plaintiffs' Exhibit 34, which has been rejected.

Q. Referring to what has been marked Plaintiffs' Exhibit 34, are you familiar with this portion of the Northwest Airlines operating manual?

A. Yes, sir.

Q. Would you state what portions of the airlines manual this consists of?

A. It is part of the DC-4 operating manual.

Q. And I will ask you what the minimum take-off weight is for a three-engine takeoff as prescribed by the Northwest Airlines operating manual for DC-4 aircraft?

Mr. Karr: I object.

Mr. Riley: Strike that. I overlooked that this exhibit has not been identified.

Q. Does this exhibit provide the minimum take-off weights for a DC-4?

(Testimony of Donald L. Leonard.)

The Court: Mr. Riley, do not let him answer a question that depends upon the truth to his referring to the contents of this exhibit, except those formal things like its date, what kind of information is contained in it or who issued it, if anybody did, or to whom it was addressed or [1006] who wrote it, or something like that. Any other kind of question relating to comments is not appropriate at this stage.

Mr. Riley: I will withdraw the question.

Q. Would you state what part, if any, of DC-4 aircraft operations does this exhibit deal with?

A. It is several different parts. Do you want me to give you all of them?

Q. Will you state whether or not it deals with three-engine operation?

A. It deals with three-engine ferry operation.

Q. Is there any other part of the manual that deals with three-engine operation of DC-4 aircraft?

A. Here is a part with engine failures and restart, pull out and go around.

The Court: Does it concern a DC-4 using only three engines?

The Witness: The engine failures would, yes, sir.

The Court: Does that exhibit refer to that subject, how to use or what to do in a situation involving the use of the plane with only three engines operating?

The Witness: It has emergency operating procedures.

(Testimony of Donald L. Leonard.)

The Court: Does it have anything to do with the operation of the plane under those circumstances?

The Witness: Yes, sir, it does. [1007]

The Court: You may inquire.

Mr. Riley: I re-offer Plaintiffs' Exhibit 34 as evidence on behalf of the plaintiff.

The Court: As bearing on what issue?

Mr. Riley: As bearing on the necessity for operating rudder trim tabs; as bearing on minimum takeoff weights.

The Court: On the minimum required?

Mr. Riley: Takeoff air space for DC-4 aircraft operating on three engines.

Mr. Koch: If the Court will permit me to make the argument, since Mr. Karr was not here when the matter came up before——

The Court: If it will expedite the matter, the Court makes the exception.

Mr. Koch: Your Honor, this matter, by the title on the front page, deals with a three-engine ferry operation. When this exhibit was offered before, Mr. Cox explained the flight in question was not a three-engine ferry operation, that a three-engine ferry operation dealt with taking a plane that only had three operable engines, empty, to another airfield or another station. This is not that situation. In that case, they prescribed low minimum weights, because there is no cargo load and the trips are short. Mr. Cox pointed out at that time that the rules dealing with engine-out operation—— [1008]

The Court: We are not concerned with Mr. Cox'

(Testimony of Donald L. Leonard.)

proof. We are concerned with this witness' proof.

Mr. Koch: The exhibit itself deals with a three-engine ferry operation that is taking off from a standing start and delivering an aircraft that has only three engines to another point. Here there was a landing, not at a dead stop, but at fairly high speeds, slightly high, slightly fast. These rules—the proffered exhibit does not deal with a situation where the plane that attempts takeoff is moving when it begins. It starts in speeds in excess of 100 miles an hour. The takeoff maximum weights are not applicable, and this exhibit would only prove misleading, because it is not applicable to the facts at hand.

The Court: I would like you to adduce proof that supports your contention that it does relate to the kind of three-engine operation of the kind of plane that was in operation at the time of this accident. Proceed. The Court will suspend ruling until there is further evidence.

Q. To your knowledge, are there any other operations manuals provisions covering three-engine operations promulgated by Northwest Airlines dealing with three-engine operations of DC-4's?

A. Yes, sir.

Q. Are there any other than those which are contained in [1009] Plaintiffs' Exhibit 34?

A. I don't know. I didn't get to study it all.

The Court: Will you let him have that exhibit? Will you look through that exhibit and see what type of operations it applies to, and after you have

(Testimony of Donald L. Leonard.)

done so, I wish you, if Counsel is familiar with the form of proper questions, to ask this witness his information as to whether this exhibit relates to the operation of the kind that was here described as the kind here involved, the operation in flight carrying passengers on this four engine plane with only three engines operating.

Q. Would the safety factors incorporated in Northwest Airlines operating procedures for empty aircraft in ferry conditions be less or greater than those established for three-engine operation of an aircraft loaded with forty passengers?

A. It is a different type of operation than three-engine ferry operation.

Q. I will ask you to answer my question. Would the safety requirements be less or greater for a loaded airplane than they would for an empty airplane?

A. I would say we use the same caution on each, sir.

Q. I think that ordinarily——

The Court: Do you mean to say that that is the practice or not the practice to do so? I do not understand the import of your meaning. [1010]

The Witness: If I may, sir——

The Court: Just relate it to the existence or non-existence——

The Witness: Three-engine ferries are done only by specialists in the field, only by test pilots and not by regular line pilots. It is a very specialized operation of taking an airplane such——

(Testimony of Donald L. Leonard.)

The Court: Here the inquiry is not that. The inquiry is relating this operation to the standard of safety conduct applicable to the ferry operation. That is the subject matter of inquiry before you. Now, will you try to hold the questions in proper form, and the witness' attention to that circumstance in the questions you ask him. You may ask him other questions, and I am going to have to restrict you, because we are taking up too much time on this.

Mr. Riley: I am sorry to take up so much time. I would rather proceed to others, but——

The Court: Proceed. I wanted to tell you what you are doing.

Q. Are the safety provisions incorporated in three-engine ferry operations the same as those you would expect to use in ferrying on three engines an airplane with forty people aboard it?

A. I don't understand your question. [1011]

Q. If you were prescribing three-engine regulations relating to the operation of a Douglas DC-4, would the three-engine operating provisions of a Douglas DC-4, assuming the loss of an engine with a cargo of passengers and crew, be less than that you would use in the operation of an empty aircraft in ferry conditions?

Mr. Karr: I object to the question. This is a question——

The Court: The objection is overruled.

A. I am not entirely clear on what the CAR are classifying those two different operations.

(Testimony of Donald L. Leonard.)

Q. Isn't it perfectly obvious, as a pilot, that you would use greater safety with an aircraft with forty passengers aboard than you would in ferrying an airplane on three engines that was empty?

A. We use the same safety precautions with all our flights.

Q. The safety precautions related in Plaintiffs' Exhibit 34 dealing with three-engine ferry operation of an empty aircraft would also apply to three-engine operations of a DC-4 loaded with forty passengers, is that right? A. No, sir.

Q. Do you have before you Plaintiffs' Exhibit 29? A. No, I don't.

Mr. Riley: May 29 and Defendant's Exhibit A-5 be shown to the witness? [1012]

The Court: You may.

Q. You mentioned some damage can be caused to an oil cooler by ice breaking off props, is that correct? A. Yes, sir.

Q. That would occur in relatively heavy icing conditions before you would get prop icing of any serious degree, wouldn't it? A. Not always.

Q. Would it be true in general?

A. Yes, in general.

Q. Would you make an S turn to a runway on three engines from one mile out in a DC-4?

A. Yes, sir, if I needed to, to make my approach.

Q. Do you know why this ten-man raft which you stated was protruding from the cabin window and the astrodome of the aircraft wreckage in the

(Testimony of Donald L. Leonard.)

water off Sandspit on Sunday or Monday following the crash of the aircraft, do you know why it was protruding both from the cabin and from the astro-dome? A. Only from the survivors' testimony.

Q. Did you see it? Did you cruise over it?

A. Yes, I saw it there.

Q. Was this raft inflated? A. No, sir.

Q. Could you tell whether it had been inflated?

A. No, sir.

The Court: Did you determine for yourself whether or not the rafts had been used in this landing?

The Witness: No, sir, I couldn't tell.

Q. Would you refer to Plaintiffs' Exhibit 29, the photographs before you? Do you recognize those photographs? A. Yes, sir.

Q. Were you there when they were taken?

A. Yes, sir.

Q. Did you assist, or did you take them?

A. I didn't take them, no, sir.

Q. Does the top photograph indicate the nearest land from the wreckage?

A. No, I believe the nearest land is directly aft of the airplane.

Q. Was the tide out at the time that picture was taken?

A. The tide is coming in in this picture.

Q. Referring to Defendant's Exhibit A-5, I will ask you to read the weather report indicating the weather at Sandspit, on the last line. Read the mes-

(Testimony of Donald L. Leonard.)

sage and interpret it as a pilot, on the last line of page 1 of Exhibit A-5.

Mr. Koch: I object to the question. It isn't within the direct examination.

The Court: I do not wish to extend your opportunity of taking over any further. This was in reference to a [1014] special exhibit. Proceed.

Q. Go ahead.

A. It is Annette relay to Northwest 324 of the 17th. It says, "Terminal forecast your arrival times." That means it is a forecast or prognosis of what it will be when they get there. "Sandspit 2,000 broken to overcast, occasionally light overcast, one mile, light snow."

Q. What does the one mile refer to?

A. That refers to the forecasted visibility.

Q. I will ask you to refer to page 2.

The Court: Of what exhibit?

Q. A-5, and I will recall that you testified that Annette was reported closed. I will ask you read, then interpret, the two messages which are the third and fourth from the bottom of page 2 of Exhibit A-5.

A. The third one first?

Q. The third and fourth from the bottom of the second page of Defendant's Exhibit A-5.

A. The third from the bottom reads, "Annette 806 801 air Seattle N 7995 Fairbanks to Seattle arrived 1148 Zebra." That is 0348 Pacific Standard Time. "Landing Annette pick up boats to ferry Sandspit." Filed to Annette 1119 Zebra.

(Testimony of Donald L. Leonard.)

Q. Would you read the fourth message from the bottom?

Mr. Koch: What time is that? [1015]

The Witness: 0348 Zebra, or approximately three hours and ten minutes after the accident.

Q. Would you read the fourth from the bottom?

A. "NWA 3 Seattle Annette 191138 Zebra." The first word I don't understand. "STMGR Anchorage Northwest Operations Anchorage Seattle N7995 landing Annette in a few minutes to pick up four boats and four outboard motors and ferry to Sandspit immediately to aid in rescue operations." Signed Meyers, STMGR, filed at 191138 Zebra.

Mr. Koch: What time is that?

The Witness: That is 0338 Zebra, just three hours after the accident.

Mr. Riley: I have no further questions.

Mr. Karr: That is all, Captain Leonard.

If the Court please, I am sure your Honor will recall that early in the trial while Mr. Maynard was on the stand we offered what at that time was not a complete record of Mr. Maynard's medical service history. The one that had been furnished was white on black. We have replaced it with black on white, as we promised we would, and if it may be marked we will offer it in evidence at this time.

The Court: Do you wish to ask that it be used instead of the one already marked?

Mr. Karr: I am not sure that one was marked. If it was marked, it was withdrawn. It was A-17, I think. [1016]

The Court: Has A-17 been returned to counsel who produced it?

The Clerk: No, your Honor.

The Court: Let this thing which counsel offers for marking be substituted physically for what previously was marked Defendant's Exhibit A-17. Let this bear the A-17 mark. Delete the clerk's marks from this exhibit which I hold in my hand and return it to counsel who produced it.

Is there an objection other than the previous one; namely, that it did not comply with local rules relating to photostatic background?

Mr. Riley: I have some reservation, because I don't know for what purpose it is offered. If there is something in here that Mr. Maynard should have been examined on, I am concerned about——

The Court: It might have that possibility a thousand times. The Court will not rule upon it now. Counsel will have to confer with each other, if each is in a position to take the other's word about it.

Mr. Karr: If the Court please, if I am not very much mistaken, it was very clear in the record at the time the discussion occurred Mr. Riley had no objection.

The Court: Mr. Riley raises the question as to whether this is a duplicate of the other and the only difference being a white background is being substituted [1017] for something that was a black background, and whether or not this contains some data in it not contained in the other. Counsel will have to satisfy themselves about that.

Mr. Karr: If that is what he wants to know, I will assure him this is a complete photostat of the entire record provided by the Government.

The Court: Look at the two beside each other.

Mr. Riley: If Mr. Karr says that is the case, I am not going to challenge it.

The Court: I understand Mr. Karr to say that this, so far as material words and figures are concerned, is exactly the same as the other; that the only difference is that this is photostatted on white background, whereas in the original A-17 marked for identification as such, it was on black background of photostatic copy.

Mr. Riley: My problem was that I don't know what he intends to use it for. If it is something Mr. Maynard should be cross examined on or if they make reference to his testimony and cite inconsistencies in this record as to which he has not been examined, I think it would be prejudicial.

The Court: The only thing the Court can do about it is to reserve ruling until just before the close of the defendant's case, or reserve the right later to rule upon it. That is all I can do. It seems to me you should have [1018] already had that in mind, crossed that bridge, but the Court will give you a reasonable time.

Mr. Riley: I am sure that this is a copy of the original. I am not challenging that, your Honor.

The Court: The Court's admitting it in evidence does not depend upon whether you have Mr. Maynard here for further redirect examination or not. The Court's duty to admit it is upon its admissibil-

ity, and that is not in any way connected with your having provided yourself with the opportunity to recall for further interrogation by you your client. If there is some further checking you wish to do——

Mr. Riley: No, your Honor.

The Court: The Court now overrules the objection and does admit Defendant's Exhibit A-17 in its present form in evidence. The Court repeats that what previously was marked Defendant's Exhibit A-17 has been withdrawn, the clerk's file marks thereon have been deleted, and that thing has been returned to counsel who produced it.

(Defendant's Exhibit A-17 for identification received in evidence.)

Mr. Koch: I have another exhibit I should like to offer at this time.

The Court: Is it marked?

Mr. Koch: It has not been marked. This is the [1019] certified copy from the Army of the photostats with the seal affixed. They were white on black photostats, in violation of the Court's rule, and in accordance with the Court's direction, I have had black on white photostats prepared and request leave of the Court to substitute black on white copies for those the reverse of which are presently attached to the certificate.

The Court: The clerk, in the presence of both counsel, will accomplish that.

Mr. Koch: We will cut the black ones off and substitute the whites, is my suggestion, your Honor.

Mr. Riley: I haven't the faintest idea where they are, when they got them.

The Court: The Court continues further proceedings in this case until tomorrow morning at 10 o'clock. I do not understand why counsel could not arrange to expedite matters a little more. We have now to inconvenience other counsel who have been waiting on this calendar for two weeks or more, due in part to the inability of counsel in this case to expedite it. The Court does not think it is too commendable. Those connected with this case are excused until tomorrow morning at 10 o'clock, and may now retire.

Mr. Koch: May Mr. Sanders be excused from further proceedings in the case? [1020]

The Court: Is there any objection?

Mr. Riley: Your Honor, I might——

The Court: The Court will decline to do so at this time.

(The Court was adjourned.)

The Court: We will now resume the case currently on trial before the Court. Was there a witness on the stand as to whom counsel had finished interrogating?

Mr. Koch: There was not a witness on the stand, but the Court had before it a proposed exhibit. The exhibit is a certified copy received by the Court from the Judge Advocate of the United States Army, setting forth true copies——

The Court: What was the number of it?

Mr. Koch: I don't believe it has a number yet,

your Honor. We are attempting to substitute the black on white.

The Court: Does the thing which you wish to bring out and put this in the place of have a number?

Mr. Koch: No, your Honor.

The Court: Does anything for which you seek to substitute this have a number?

Mr. Koch: No, your Honor. I would like to offer it to be marked.

The Court: It will be marked.

(Service record marked Defendant's Exhibit A-41 for identification.) [1021]

The Court: I have an indistinct recollection that some reference to another thing already identified was made when counsel yesterday afternoon mentioned this thing you are now speaking of, but perhaps this is not the former identified thing which the Court now is speaking of.

Mr. Koch: I believe that is true, your Honor. I think the Court has reference to——

The Court: What is the marking?

Mr. Koch: A-41, your Honor.

The Court: The Court declines to receive that in the record for marking. The Court strikes it from the record and returns it to counsel who produced it, because it violates the local rules of this Court relating to black background photostats.

Mr. Koch: In accordance with the Court's direction, I have had substituted pages photostatted under the supervision of the clerk of this Court, and

I request the Court's leave to substitute the black on white.

The Court: Let what you propose to be an exhibit in this case be brought forward and marked by the clerk, and it will be given the same mark, A-41, and we will see if it offends the rule. If it does, the Court will strike it and return it to counsel. This should have been disposed of long ago. That will now be marked Defendant's Exhibit A-41. [1022]

Mr. Riley: If the Court please, both these documents purport to be some type of military order.

The Court: He may offer proof as to their identification, unless you admit something that he thinks is sufficient. Let him make a statement to the Court that is thought to dispose of the matter.

Mr. Koch: Your Honor, under the Federal Rules of Civil Procedure, authenticated documents from Government agencies, of which the United States Army is one, are properly received in evidence, and——

The Court: I have nothing that is a certificate from any agency before me, and I decline to accept for consideration anything that is not marked for identification or used as such.

Mr. Koch: May I detach that certificate?

The Court: No, because in that case it would be defiling the thing certified.

Mr. Koch: The Court directed that the photographer be brought to take a photostat of the attachments, which has been done, your Honor.

The Court: The Court refuses to recognize, in

the first place, a certified copy, each and every part of it. It has not been accepted for marking for identification in this Court. You cannot properly detach from a file the thing which is treated by the defendant as certified, some [1023] part of it, and remains a certified copy.

Mr. Koch: We have re-duplicated exactly the parts the Army has certified.

The Court: I am sorry, but the Court declines to receive it.

Mr. Koch: In that event, your Honor, I would like to make an offer of proof with respect to it.

The Court: You may.

Mr. Koch: I wish to state that the offered exhibit received from the Army, from which the Court directed the clerk to strike the marking identification, was received directly by this Court from the United States Army under the seal of the Judge Advocate General of the United States Army, in accordance with Rule 1738, Title 28, USCA, under which Government exhibits, including Army authenticated documents, shall be received in evidence. The Federal Rules of Civil Procedure do not prevent the reception of such evidence even though the attachments may be photostats, white on black. To comply with the Court's direction, we have provided enlarged photostats of those attachments, black on white. We have requested the Court to attach the enlarged copies to the Judge Advocate General's certification and receive it in evidence.

In the case of Maynard, one of the plaintiffs in this action, that special order is already in evidence,

having [1024] been received through his own identification when he was on the witness stand.

In the case of Sgt. Waldrep, the certified copy which the Court has declined to receive in evidence would show conclusively that this soldier was proceeding on United States Air Force military orders, and directed to proceed from Korea, or Japan, I believe, to the Zone of Interior by military aircraft.

The Court: There is no photostat or other copy of any kind on white background, in particular. There is not of the certificate itself, attached to what is now marked Defendant's Exhibit A-41, contrary to the defendant's statement of what he will prove or does offer to prove in this case.

Mr. Koch: Your Honor, it would be only possible from what the Court has said to provide a photostatic copy of the certificate.

The Court: You have not done that, and you do not now have it done.

Mr. Koch: I didn't understand that the Court requested that.

The Court: The Court made no request of you to do anything.

Mr. Koch: If the Court will receive a photostatic copy of the certification from the Judge Advocate General, [1025] I will have it prepared and delivered to the Court this forenoon.

The Court: The Court is not making any request. I am reminding you what you do not have, contrary to your offer of proof.

Mr. Koch: The Court declined to release the

document to counsel for the purpose of making the copy.

The Court: If that document is in the Court's possession through the clerk's office counsel have the same opportunity to go in there with a camera and make the copy that all other counsel have in all other situations, of which fact the Court has previously advised counsel.

Is there any objection to the offer of proof?

Mr. Riley: There is, your Honor. If the Court please, plaintiffs' object to the offer of proof for the reason that both of these proffered documents are not related on the face of them in any way to the flight of defendant's, 324, January 18 - 19, 1952. There is no evidence on the face of them, either by the certificate which is itself inadmissible, or by any other evidence before the Court, that these documents were ever received by either of the plaintiffs, Maynard or the decedent Waldrep. There is no showing, and it could have been provided by the defendant, that these orders were ever superseded or cancelled or were in effect on the date of [1026] the death of Sgt. Waldrep, on the date of the injury of the plaintiff Maynard.

The Court: I understood from counsel's offer of proof that he would prove, among other things, that this Defendant's Exhibit A-41, so far as its present form and content is concerned, is the very same material which is already in evidence in the evidence received here during this trial in the Maynard case.

Mr. Riley: I believe he refers to Mr. Maynard's

service record, your Honor, and I don't know whether it is in the service record or not.

The Court: Will you look and see? If it is already in the record, that would seem to be another reason for lack of necessity of putting it in again, because the two cases are being tried together, and the evidence in one which is pertinent to the issues in the other is evidence in both, according to the effects of the consolidation order.

Mr. Koch: Your Honor, Exhibit A-16 is the special order covering travel by Mr. Maynard, and he admitted in the testimony that this was the special order on which he traveled.

The Court: I am trying to get counsel's minds at one upon this issue which is raised by your statement that this thing, less the certificate, is identical with [1027] something that is already in evidence in this case, at this trial.

Mr. Koch: It is with respect to Maynard, but it isn't with——

The Court: If it is in the case with respect to Maynard, it is in with respect to all other litigants in this case.

Mr. Koch: Except that this exhibit A-16 refers only to Maynard, and there was a separate order issued by this military base with respect to Sgt. Waldrep.

Mr. Riley: The document which purports to relate to the decedent is issued, as he said, by an entirely different military agency.

The Court: I do not understand that it is one and the same material. As I understand it, all he

meant to say last is that a similar statement as to one of the parties only is in evidence. That party is not the decedent in the Gorter case, which is the party as to whose situation exclusively this Defendant's Exhibit A-41 for identification relates, as I understand it now. Is there any objection to the offer?

Mr. Riley: Yes, your Honor, because there is nothing in it.

The Court: The objection is sustained, and I advise counsel if before the close of the case or if within a [1028] time that may be limited by the Court, if the Court does limit any time, if before the defendant's case in chief as to this matter is closed the defendant offers to this Court for further consideration a certified copy of the entire parts of the material certified by this governmental departmental certifier authorized by law to make such certification, the Court will consider it again. I do not see how any lawyer could possibly delay this matter until this stage of this trial and then force a situation which would involve the Court's extending the time for a matter like this against the effect of the closing of the defendant's case in chief. You may proceed.

Mr. Koch: Your Honor, may the refused exhibit, including the certification, be returned to counsel?

The Court: Is there any objection to that, to accommodate counsel in getting the certificate on it?

Mr. Riley: Yes, your Honor. With the distinct disadvantage to the plaintiff Gorter, I don't think

it should be removed from the possession of the clerk at this time.

The Court: I believe we can all identify it. Let plaintiffs' counsel look at it. You see the time you are consuming in this type of thing. Counsel on both sides are responsible. Will you look at the material, the substance of what has been marked Defendant's Exhibit A-41, and see if it is the same substance as the other material [1029] in the matter, so that you can identify it later.

Mr. Riley: Yes, your Honor.

The Court: The Court does grant the request to withdraw from this file the defendant's A-41 for identification with a view to seeing if he can still, after all these days since the beginning of this trial, get this in further shape. You may proceed.

Have counsel on each side finished the interrogation of Captain Leonard, who was on the stand yesterday?

Mr. Riley: I had completed my cross examination, your Honor.

The Court: Have you finished?

Mr. Koch: Yes, your Honor. May he be excused?

Mr. Riley: If the Court please, I don't know that we will need him on rebuttal or not at this time. I would like to have him remain, since we are very near the close of the trial.

The Court: The Court asks Captain Leonard to await the further direction of the Court. [1030]

JOHN IRVINE BIRD

called as a witness by defendant, was sworn and testified as follows:

Direct Examination

By Mr. Koch:

The Court: Will this witness state his name?

The Witness: John Irvine Bird.

Q. What is your address?

A. 206 West 35th Avenue, Vancouver, British Columbia.

Q. What business or profession are you engaged in

A. I am a lawyer.

Q. Will you trace your educational background?

The Court: Where are you licensed, if you are, to practice law?

The Witness: Throughout Canada, My Lord.

The Court: Are you a member of the bar, which we call a member of the bar of the legal profession, authorized to practice that profession at Vancouver, British Columbia?

The Witness: I am, Your Honor.

Q. Will you trace your educational background, Mr. Bird?

A. I received my university education at the University of British Columbia and graduated from there with a Bachelor of Commerce degree in 1938. I took one year of post-graduate work in constitutional law. During the same year, [1031] I studied for and passed the bar examinations for the first year set by the Law Society of British Columbia.

(Testimony of John Irvine Bird.)

During the next year, I went to Halifax, Nova Scotia, where I attended Dalhousie University, passed the first year examinations there. That was the Law School, and then since that was in early 1940, I was in the Naval Service, left there in late 1945, and returned to British Columbia, where I passed such additional examinations as were necessary to enable me to be admitted as a solicitor and called as a barrister in British Columbia, and commenced practice.

The Court: What type of work generally in the law have you done since you began your practice at Vancouver?

The Witness: I have specialized in admiralty and shipping matters, Your Honor.

The Court: Does the attorney for the plaintiffs question this witness' qualifications to testify as a lawyer, as an expert on British Columbia laws or Canadian laws?

Mr. Riley: We do not, Your Honor.

The Court: If agreeable to counsel, can you pass this matter relating to the preliminaries?

Mr. Koch: I wish to cover one or two questions only relating to his background.

The Court: You may do so. [1032]

Q. Have you had any teaching experience?

A. Yes, sir. When the Law School was established at the University of British Columbia, I lectured for the first four years, I think it was, on admiralty and shipping matters.

(Testimony of John Irvine Bird.)

Q. What is your present association?

A. I am a partner in the firm of Campney, Owen, Murphy & Owen.

Q. Are you familiar with the Families' Compensation Act of British Columbia?

A. I am.

(Families' Compensation Act marked Defendant's Exhibit A-42 for identification.)

Q. Is that a copy of the Families' Compensation Act? A. Yes, it appears to be.

Q. What is the nature of the Families' Compensation Act of British Columbia?

A. Well, this statute is passed on what we know in Canada as Lord Campbell's Act, which was a British statute. This act was passed for the purpose of giving to the representatives or the executor, administrator, of a deceased's estate a right of action against anyone who caused the death of the deceased in a wrongful manner, and it was necessary because at common law no such action existed.

Q. What is the British Columbia Supreme Court, if you know?

A. The British Columbia Supreme Court is a court of original [1033] jurisdiction in British Columbia having cognizance of all pleas whatsoever and jurisdiction in civil and criminal matters arising within the province.

Q. Do you know whether or not its jurisdiction would include a wrongful death action brought under the Families' Compensation Act?

(Testimony of John Irvine Bird.)

A. It would.

The Court: Have you ever compared this act which you named Families' Compensation Act with the general wrongful death act form in the American states?

The Witness: I have not, Your Honor.

Q. Did you hear the testimony of Mr. Leonard with respect to the location of the airplane after the impact and the location of the airplane after the attempt had been made to tow the plane, and the location of the plane on June 9, 1952, when Mr. Leonard re-examined the plane? A. Yes, sir.

Q. Based on such testimony, where did the accident happen?

Mr. Riley: I object to that.

The Court: The objection is sustained. You might ask him where Sandspit is, if he knows where it is.

Q. Do you know where the Queen Charlotte Islands are?

A. Yes, sir, I have been there.

Q. Are the Queen Charlotte Islands——

The Court: Ask him where they are. [1034]

Q. Where are the Queen Charlotte Islands?

A. The Queen Charlotte Islands are a group of islands located off the coast of British Columbia, about sixty miles west of the mainland.

The Court: What mainland?

The Witness: Of the Province of British Columbia.

Q. And where is Moresby Island, if you know?

(Testimony of John Irvine Bird.)

A. Moresby Island, I believe, is the southernmost of that group.

Q. And are you familiar with a point known as Sandspit? A. Yes, sir.

Q. Where is that?

A. That is at the end of Skidegate Inlet.

The Court: In what nation, what province, county city or place is that place Sandspit, if you know?

The Witness: It is in the County of Prince Rupert, in the Province of British Columbia.

The Court: In what nation?

The Witness: Canada.

The Court: The Dominion of Canada?

The Witness: Yes, sir.

Q. In your opinion, based on Mr. Leonard's testimony, did the accident happen in British Columbia?

Mr. Riley: Objection.

The Court: The objection is sustained.

Q. What court in British Columbia, if you know, would have [1035] had jurisdiction of the subject matter of this airplane accident?

A. The Supreme Court of British Columbia.

Q. Assuming the jurisdiction on the part of the court of the defendant, would the British Columbia Supreme Court have jurisdiction to hear and decide litigation arising out of this accident?

Mr. Riley: Objection.

The Court: The objection is overruled. He doesn't

(Testimony of John Irvine Bird.)

say "exclusive". A. It would.

Q. Would that jurisdiction be exclusive?

The Court: The objection is sustained. Do you make objection to that?

Mr. Riley: Yes, I do, Your Honor.

The Court: The objection is sustained.

Q. What have you to say with respect to the exclusive aspects of such jurisdiction?

Mr. Riley: If the Court please, I want to object.

The Court: The objection is sustained.

Mr. Riley: I would like to elucidate and—well——

Mr. Koch: May I ask the basis?

Mr. Riley: Counsel intends to and is about to go outside the scope of his pleadings and his amended pleadings which were permitted shortly before the original [1036] trial date after the pre-trial hearings in this action. He alleged—and I refer the Court to his amendment, paragraph IX of the defendant's answer, lines 17-21, where he states: "The defendant alleges that the applicable statute on which the plaintiffs' claim should have been based is Chapter 116, British Columbia Revised Statutes 118, entitled 'Families' Compensation Act.' "

Mr. Koch: Your Honor, I am completely within my pleadings. I am trying to ask the question that does not include another jurisdiction. I am asking whether or not this jurisdiction is exclusive, and if the answer is that it is exclusive, I am exactly within my pleadings.

(Testimony of John Irvine Bird.)

The Court: The objection is sustained.

Q. If the British Columbia court had before it a wrongful death action stemming from the accident, what law would the court apply?

Mr. Riley: I want to object. The question is outside the scope of the pleadings. I believe he can ask "Could it have applied." He cannot ask him whether it would have.

The Court: The objection is sustained.

Q. If the British Columbia court had before it a wrongful death action stemming from the accident, what law could the court have applied?

A. It could have applied the Families' Compensation Act.

The Court: Of the—— [1037]

The Witness: Province of British Columbia.

Q. Assuming that on January 19, 1952, at about 1:40 A.M., an airplane attempted a takeoff from the Sandspit, British Columbia, airport, made a left bank after leaving the end of the runway and ditched in the waters of Hecate Strait from one-half to three-quarters of a mile from shore; and bearing in mind Mr. Leonard's testimony; and assuming further that a wrongful death action in the British Columbia Supreme Court was brought by an administratrix of the estate of a passenger who died in the accident as a result of drowning or exposure; and assuming further that the British Columbia Supreme Court had jurisdiction of the defendant, would the British Columbia Families' Compensation Act be applicable?

(Testimony of John Irvine Bird.)

Mr. Riley: If the Court please, I believe, first, the hypothetical question calls for a conclusion of the witness based on the testimony of Mr. Leonard. Secondly, the question asks if the court would apply the hypothetical question, not could it apply the Families' Compensation Act, and it should delete any reference to Mr. Leonard's testimony.

The Court: That part of the objection is sustained. You may use the word "could."

Mr. Koch: I said, "Would it be applicable."

The Court: With that interpretation on the question, [1038] the objection is overruled, and the witness may answer the question. It is merely the last concluding words that should be referred to as the form of the question that is to be finally submitted. Do you understand it?

The Witness: I believe so, your Honor. It would be applicable.

Q. Will you read Section V of the Families' Compensation Act?

The Court: It has not been offered.

Mr. Koch: Excuse me. I do offer it, your Honor, at this time.

Mr. Riley: The pleadings make reference only to Sections III and V of the Families' Compensation Act. We object to the admissibility of this document as to anything other than Sections III and V of the Families' Compensation Act.

Mr. Koch: That is not my interpretation.

The Court: May I see the pleadings?

Mr. Koch: Yes, your Honor.

(Testimony of John Irvine Bird.)

The Court: Let counsel have the file and let him point out the pleadings. After defendant's counsel has pointed it out, I wish the opportunity to be given to plaintiffs' counsel to point it out.

Mr. Riley: We have it, your Honor.

The Court: Will you show that to opposing counsel, Mr. Riley? What have you called to the attention of Mr. [1039] Koch to illustrate your objection?

Mr. Riley: I have shown Mr. Koch a document entitled "Amendment of Paragraph IX of Defendant's Answer," which was further amended at the time by interlineation by Mr. Koch, at the time of the argument on the motion for permission to amend which was made after the entry of the pre-trial order and before trial.

The Court: Will you read the words and figures used in the pleadings to identify the sections which are pleaded, Mr. Koch?

Mr. Koch: This is entitled Paragraphs IX and XII, affirmative defense, and the pertinent portion reads as follows:

"Defendant specifically denies the applicability of Section 4.20.010 of the Revised Code of Washington and alleges that the applicable statute on which plaintiff's claim could have been based is Chapter 116, British Columbia Revised Statutes, 1948, entitled, 'Families' Compensation Act,' Sections 3 and 5, which provide as follows;—"

The Court: That is sufficient. Are there any other sections referred to?

(Testimony of John Irvine Bird.)

Mr. Koch: No, not as such. The whole Act is referred to, and the two sections are quoted.

The Court: Let me see the pleading. The objection [1040] is sustained.

Mr. Koch: I think that at the time of the objection, I had asked that the exhibit be admitted in evidence.

The Court: And you objected to admitting it in evidence because it contains more than 3 and 5?

Mr. Riley: Yes, your Honor.

The Court: The objection is overruled. Defendant's Exhibit A-42 is limited in all respects to Sections 3 and 5 thereof quoted in this last pleading mentioned by counsel, and no other part of the Act is admitted, merely Sections 3 and 5 of the Act.

Mr. Koch: Does the Court rule that the pleading does not embrace the entire Act?

The Court: I do not. I sustain the objection that the only sections pleaded and relied upon are those two, and it is only as to those two sections that the Court receives this Defendant's Exhibit A-42. As to all other parts of it, the Court will wholly disregard Defendant's Exhibit A-42, but will give full consideration to that part of it which relates to and sets forth Sections 3 and 5.

(Defendant's Exhibit A-42 for identification received in evidence.)

Q. Mr. Bird, will you read Sections 3 and 5, please?

A. Section 3 of the Families' Compensation

(Testimony of John Irvine Bird.)

Act, Province of [1041] British Columbia, reads as follows: "Whenever the death of a person shall be caused by wrongful act, neglect, or default and the act, neglect, or default is such as would (if death had not ensued) have entitled the party injured to maintain an action and recover damages in respect thereof, then and in every such case the person who would have been liable if death had not ensued shall be liable to an action for damages, and notwithstanding the death of the person injured, and although the death shall have been caused under such circumstances as amount in law to an indictable offense."

Q. Will you read Section 5, please?

A. "Section 5. Not more than one action shall lie for and in respect of the same subject-matter of complaint; and every such action shall be commenced within twelve calendar months after the death of such deceased person."

Q. Is Section 5 substantive or procedural?

Mr. Riley: I will object to that, the reason being that counsel has not alleged in his allegations and in his pleadings the whole law and what the effect of the law is and the construction of the law. He has only alleged simply that we could have commenced an action under this Act, and he has not pleaded the entire law, and he is required to do so.

The Court: Will you read the pleading setting out the [1042] words by which your pleadings' reference to this statute of British Columbia was set out?

(Testimony of John Irvine Bird.)

Mr. Koch: "Defendant does not have sufficient information to form a belief as to the truth or falsity of the allegations set forth in the first two lines of Paragraph IX"—that is referring to plaintiffs' complaint—"and therefore denies the same. Defendant specifically denies that the alleged beneficiary for whose benefit plaintiff is alleged to have instituted this suit has been damaged in the amount of Fifty Thousand Dollars or in any other amount by reason of the facts alleged herein. Defendant specifically denies the applicability of Section 4.20.010 of the Revised Code of Washington and alleges that the applicable statute on which plaintiff's claim could have been based is Chapter 116, British Columbia Revised Statutes, 1948, entitled, 'Families' Compensation Act,' Sections 3 and 5, which provide as follows; and which requires dismissal of plaintiff's complaint for failure to state a cause of action. That said statute's limitation provisions bar this action." Then Sections 3 and 5 are quoted.

The Court: The issue here is what?

Mr. Riley: The issue is, your Honor, that the allegation states a mere legal conclusion. There is no allegation that the limitation provision contained in [1043] Section 5 of the British Columbia Families' Compensation Act is procedural as against substantive. As the Court knows, if it were procedural——

The Court: The objection is overruled. Your question is directed, is it not, to the state of the British Columbia law on that question?

(Testimony of John Irvine Bird.)

Mr. Koch: Yes, your Honor.

The Court: The objection is overruled, but suspend the answer until after the recess. The Court is now at recess for ten minutes.

(The court was at recess for ten minutes.)

The Court: You may proceed.

Mr. Koch: Will the reporter read the last question?

(Last question read by reporter as follows:

Q. Is Section 5 substantive or procedural?)

Mr. Riley: The objection is repeated, if the Court please, as to that question.

The Court: The objection is overruled. I understand that the question and the answer relate to the state of British Columbia law as understood among British Columbia lawyers, of which this witness is one. That is my understanding of what was intended by the question.

Mr. Koch: That is my understanding of the question, your Honor.

A. Yes, it is substantive, because—— [1044]

Mr. Riley: Objection.

The Court: You needn't give the "because" yet.

Q. Will you please explain your answer?

Mr. Riley: I would like to object.

The Court: The objection is overruled.

A. The reason is that this statute gave a right of action which did not exist at common law, and, in consequence, it is part of the substantive law of British Columbia.

(Testimony of John Irvine Bird.)

Q. Mr. Bird, what is the British North American Act?

The Court: If you know.

Mr. Riley: Objection. There is no——

The Court: The objection is sustained until the question is properly conditioned.

Q. If you know, will you state what the British North American Act is?

Mr. Riley: If the Court please, as to that question I would like to state that there is no reference to any other statutes within the scope of these pleadings, and the question is irrelevant. It is completely outside the scope of defendant's allegations as to the applicable law or what law could have been applied.

The Court: Do you specifically contend or do you not further contend specifically that since it is not pleaded, it is not the proper subject of proof, being a foreign law?

Mr. Riley: Yes, your Honor. [1045]

Mr. Koch: Your Honor, the purpose of the question is to develop through this witness a division of law-making and legislative power between the Dominion and the Province, and through that the derivation of authority to apply the Families' Compensation Act by the Province will be explained, and this is fundamental.

The Court: You can ask this witness' opinion as to whether or not, if this Act which has been received in evidence as to Sections 3 and 5 was passed or enacted by a legislative body, whether or

(Testimony of John Irvine Bird.)

not such body had had such legislative powers, and it is not necessary to go into all this long detail about what all the Canadian law provides.

Q. What Government, if you know, has the exclusive authority to deal with regard to property and civil rights?

Mr. Riley: I don't like the terminology "exclusive," and I am afraid what counsel is leading to, he wants something in the record that deals with the exclusive nature of this.

The Court: The Court sustains that objection. State, if you know, Mr. Bird, does the legislative authority enacting Defendant's Exhibit A-42 have the legislative authority to pass and enact such an act?

The Witness: It has, your Honor.

The Court: Did it have such authority when that [1046] exhibit was enacted into law?

The Witness: It did, your Honor.

Q. What have you to say as to whether the Families' Compensation Act deals with matters affecting property and civil rights?

Mr. Riley: I object, your Honor. It is calling for a conclusion and it is a leading question.

The Court: In addition to what has already been disclosed as to the issues, what is it now that has not been covered by the proof already as to this wrongful death act of Canada?

Mr. Koch: What has not been covered is the fact that so far as the Canadian law-making power is concerned, only the legislature of British Co-

(Testimony of John Irvine Bird.)

lumbia could enact and deal in this field of property and civil rights, that no other legislature or other courts in a different jurisdiction of Canada would have any function in that respect.

The Court: Is that admitted, so far as his dealing with the subject is concerned?

Mr. Riley: No, your Honor. It is entirely outside the scope of defendant's pleadings in this matter. Counsel is attempting by any route he can, a devious route, to prove, if he can, he is trying to assert this is some kind of an exclusive remedy, which he has not alleged and which he cannot prove. [1047]

The Court: Where is the allegation?

Mr. Koch: We have alleged it, your Honor. We have alleged that the applicable statute on which plaintiff's claim could have been based is Chapter 116, British Columbia Revised Statutes, 1948, entitled "Families' Compensation Act," Sections 3 and 5, which provide as follows, and which require dismissal of plaintiff's complaint for failure to state a cause of action, that said statute's limitation provisions bar this action.

The Court: The objection is sustained. The Court treats this proof as tending to establish, and if I hear no other proof on the subject, it will establish the fact as alleged that if the Canadian law is thought by this Court to govern this action, that it is all stated in these Sections 3 and 5 here in question.

(Testimony of John Irvine Bird.)

Mr. Koch: I have a question that may invade the Court's ruling.

The Court: I will hear it.

Q. Could the wrongful death action now before this Court be properly entertained by the Admiralty Court in British Columbia?

Mr. Riley: I object to the question. It is leading.

The Court: What is there in the pleadings that makes that material?

Mr. Koch: The fact that he said it is the Families' [1048] Compensation Act that applies, and I wish to negate the possible interpretation that some other court could have entertained this action, too.

Mr. Riley: And also implicit in the question, that there are other laws in Canada. He made specific reference to admiralty law, which is not pleaded.

The Court: The objection is overruled.

A. No, the Admiralty Court in British Columbia would not have jurisdiction, in the circumstances.

The Court: Would it have jurisdiction to apply to admiralty jurisdictional facts regularly brought before the British Columbia admiralty courts of these Sections 3 and 5 causes of action under this Families' Compensation Act of British Columbia?

The Witness: If I understand your Lordship—

The Court: Would the Admiralty Court be able to apply the rights given to persons and litigants under Sections 3 and 5 of the Families' Compensation Act?

(Testimony of John Irvine Bird.)

The Witness: Yes, your Honor. In a quite recent case, the judge of the admiralty district in British Columbia stated, if my recollection is correct, that his court, sitting in admiralty, could apply the provisions of the Families' Compensation Act.

The Court: Is that what you sought?

Mr. Koch: Yes, your Honor. One further aspect of it. [1049]

Q. To what extent, if any, does the admiralty jurisdiction extend to airplane accidents?

A. The admiralty court has jurisdiction in respect of salvage of airplane accidents, of the aircraft, rather. It does not have jurisdiction over wrongful death actions resulting from an aircraft crash or accident unless the aircraft collided with a vessel or was damaged as a result of the negligent navigation of a vessel.

The Court: That last statement the Court does not understand, in view of your prior one that if the litigation under Sections 3 and 5 of the Families' Compensation Act was properly submitted to the Admiralty Court, it could adjudicate those rights under that Act. I do not understand how your last statement can conform with what I understood you to say previously.

The Witness: Your Honor, if it had jurisdiction in the matter it could apply the Families' Compensation Act.

Q. With respect to the accident off Sandspit, you testified before the recess, as I recall, that

(Testimony of John Irvine Bird.)

Sandspit and Moresby Island are in British Columbia, did you not? A. That is correct.

Q. Do you know how far into the water ownership of land vests—how far out is still British Columbia?

The Court: If you know, how far out from shore.

A. The Province of British Columbia extends certainly to [1050] ordinary low water mark. Beyond that out to what is known as the three-mile limit, the Province and the Dominion have exercised—have legislation in respect of that area, but there has not been any definite judicial pronouncement as to the ownership of the land between ordinary low water mark and a point three miles seaward.

Mr. Koch: I have no further questions.

Mr. Riley: We have no questions, your Honor.

The Court: Is there anything further?

Mr. Koch: No, your Honor.

The Court: You may be excused from the stand, Mr. Bird.

Mr. Koch: We will call Mr. Kildall.

JOSEPH M. KILDALL

called as a witness by defendant, was sworn and testified as follows:

Direct Examination

By Mr. Koch:

The Court: State your name for the record, please.

(Testimony of Joseph M. Kildall.)

The Witness: Joseph M. Kildall.

The Court: What was your father's name?

The Witness: Harold.

The Court: Did he ever have anything to do with teaching navigation? [1051]

The Witness: Yes, sir.

The Court: Did you ever have anything to do with that subject?

The Witness: Yes, sir.

Mr. Koch: Your Honor, before interrogating this witness, I would like to offer the exhibit that was previously offered.

The Court: Have you seen it?

Mr. Riley: Yes, your Honor, I have seen it.

The Court: Do you wish, Mr. Koch, to have what you have handed the clerk put together and marked what was marked Defendant's Exhibit A-41, and to be used as a substitute for what was previously so marked and previously withdrawn and delivered to counsel?

Mr. Koch: Yes, your Honor.

The Court: Is what is now marked A-41 an exact reproduction by photostat process of what was previously marked A-41?

Mr. Riley: It is, your Honor.

The Court: The Court has rearranged the exhibit. Let both of them be shown to each counsel and let them see what form the exhibit now has.

Mr. Koch: I now offer Defendant's A-41 in evidence.

Mr. Riley: Your Honor, I must object as to the

(Testimony of Joseph M. Kildall.)

decedent Waldrep. This document has not been [1052] shown by any testimony of anyone ever to have been received by him before his death, or, if so, when it was in effect. There is nothing before the Court or in the record in testimony, and I don't know that this was ever received by the decedent or how it affects him in any manner. I think it is entirely irrelevant so far as the issues before this court.

The Court: Do you dispute that the decedent Waldrep's service number was RA 14 315 210?

Mr. Riley: I have 14 315 210 as his service number.

The Court: This is a certificate relating to the service record of that person, a true photostatic copy of Letter Orders 142, Headquarters 6403d Personnel Processing Squadron, etc. Do you deny that these papers so certified are material to any issue in this action?

Mr. Riley: Yes, your Honor, I do deny that they are material.

The Court: On what issues do you offer these various parts of what is now marked Defendant's Exhibit A-41 for identification?

Mr. Koch: Both attachments, your Honor, recite that the servicemen involved are proceeding to the Zone of Interior, the United States, by military aircraft. One of the causes of action alleged by the plaintiffs is the applicability of the Warsaw [1053] Convention, an international treaty providing for air carriage and rights and liabilities with

(Testimony of Joseph M. Kildall.)

respect to persons subject to that act. In the adherence of the United States of America to the Warsaw Convention, an exception was made with respect to transportation of the United States Government. This is such transportation, and it bears directly on the issues of the second cause of action in the Gorter case.

Mr. Riley: If that is what it is offered to prove, I believe the documents are entirely hearsay.

The Court: The objection is overruled. Defendant's Exhibit A-41 is now admitted.

(Defendant's Exhibit A-41 for identification received in evidence.)

The Court: The Court has heard this witness testify before, and the Court from that experience knows something about this man's navigational activities.

Mr. Koch: If the Court accepts this witness as an expert witness——

The Court: I do not know what he is called for. He may be called for some other unrelated matter. You may ask him his name and occupation and what he has done recently in regard to the occupation.

Q. Will you state your name, please?

A. Joseph M. Kildall.

Q. And your address? [1054]

A. 909 Fourth Avenue, YMCA Building.

Q. What is your present occupation?

A. I am a navigation instructor, chief navigation instructor.

(Testimony of Joseph M. Kildall.)

Q. How long have you been in the field of navigation work?

A. I have been teaching navigation for fifteen years, slightly over fifteen years.

The Court: Where have you been teaching?

The Witness: YMCA Navigation School.

The Court: How many hours a day?

The Witness: Seven and a half hours for each working day, half a day on Saturday.

The Court: How many years have you been doing that?

The Witness: Slightly over fifteen years.

The Court: What aspects of navigation do you teach?

The Witness: We mainly prepare men for merchant marine examinations as licensed deck officers. We also teach men for fishing, yachting, and various navigational work.

The Court: Do you wish to make any inquiry as to whether opposing counsel has any objection to his qualifications to speak as an expert on navigation matters?

Mr. Koch: Yes, I would like to make that inquiry.

Mr. Riley: No, I do not, as to anything in the United States.

Q. What has been your experience apart from teaching? [1055]

A. I started going to sea about 1932, and got a license as third mate in 1937, and sailed——

The Court: As quickly as feasible with the de-

(Testimony of Joseph M. Kildall.)

fendant's case in chief, inquire of his experience in navigation in and about the waters near the place where this accident occurred.

Q. What is your present rating in the maritime?

A. I hold a license as master of ocean steam and motor vessels, any gross tons.

Q. Have your activities taken you to the waters in the neighborhood of British Columbia?

A. Yes.

Q. The Queen Charlotte Islands and that general area?

A. Yes, sir, I have been through there several times.

Q. Are you familiar with seacoasts in the vicinity of Sandspit, Skidegate, and those related beaches?

A. I have been by this area.

Q. Are you familiar with charts and with the calculations necessary to ascertain heights of tides?

A. Yes, sir, I am.

Q. Have you been able to calculate the tide on January 19, 1952, at approximately 1:40 A.M.?

A. Yes, sir, I have.

Q. At Sandspit, British Columbia?

A. Yes, sir. [1056]

Q. What was the height of the tide at that time?

A. The height of the tide on January 19, 1952, for Shingle Bay, which is adjacent to——

Mr. Riley: I object, counsel. The witness is referring to what is written on printed matter before him.

(Testimony of Joseph M. Kildall.)

The Court: Will you lay aside the written matter?

Mr. Koch: May he refer to computations?

The Court: I see no reason for it.

Q. Have you made computations with respect to the height of the tide at this particular hour and date? A. Yes, sir, I have.

Q. With reference to the computations which you have made, if that is necessary, what was the height of the tide at this time in question?

A. It was 10.672 feet at 1:40 A.M.

The Court: That was the height of the tide?

The Witness: Yes, sir.

Q. Was it rising or falling?

A. The tide was rising at the time.

Q. At what rate, if you know?

A. The rate would only be an approximation, two feet per hour.

Q. Did you determine the height on June 9, 1952, of the tide at the lowest tide on that day?

A. Yes, sir. The lowest tide on June 9, 1952, had a height of .936 feet. [1057]

The Court: What time was it?

The Witness: I would have to check. It was——

Mr. Koch: May he refer to his notes for the hour?

The Court: When did you make your notes?

The Witness: I worked this out yesterday, sir.

The Court: And that is the first time you made the note as to the time?

The Witness: Yes, sir.

(Testimony of Joseph M. Kildall.)

Mr. Riley: I object, your Honor.

The Court: The objection is sustained.

Q. At approximately what time of day was this?

A. Approximately 8:27 in the morning.

The Court: Was the high tide reading about which you first testified on the same day, June 9, 1952?

The Witness: No, sir. That was on January 19, 1952.

Q. When you refer to low tide, what does that mean?

A. In each day, there are approximately four tides, two of those tides being high tides or high water, and two being low water. As to low water, that would be one of the two lowest tides of that day.

Q. When you say it is .936 feet, what does that number refer to? What would zero be?

A. Zero would be in this particular case .936 feet below the height of the tide at the lowest water.

Q. How do they get the zero measurement, the [1058] reading point of the scale?

A. The zero is determined by observation over a period of nineteen years, and an average point is arrived at to determine the zero point.

Q. An average of what?

A. The average of the low waters is arrived at.

Q. Does that mean, if I understand you correctly, that in terms of this average low water, .936 was .936 of a foot above the ordinary low water?

(Testimony of Joseph M. Kildall.)

Is that what you are pointing out, or do you mean something else?

Mr. Riley: I don't like to object, because I would like to see this case finished before Monday, but counsel should not lead the witness.

The Court: Avoid leading.

Mr. Koch: I will rephrase it, your Honor.

Q. In terms of this average that is determined over a nineteen year period, explain the measurement of .936 feet of June 9, 1952, at low tide.

A. .936 would indicate a plus tide above the zero point used for the measurement of the tide and also the soundings of that area.

Q. What would be the term that zero relates to? Is there a term that describes zero?

A. Zero would be normal low water.

Q. Did you consult the charts and make [1059] calculations with reference to the tides in the year 1952?

A. Yes, sir. I checked a few other tides during that year.

Q. Were there other tides higher or lower than .936 feet? A. Yes, sir.

Mr. Riley: If the Court please, this whole line of questioning deals with reference to documents not now before the Court, hearsay matters, which this witness has admitted he examined yesterday and he apparently does not have with him now, except for his own notes he prepared for his testimony. I object to the entire line of questioning

(Testimony of Joseph M. Kildall.)

and proceeding any further along this line, for that reason.

The Court: The objection is overruled. I wish you to be as brief as is humanly possible.

Mr. Koch: Would the reporter read the last question?

(Last question read by reporter.)

A. Yes, sir, there were other tides during the year.

Q. That was in 1952? Your answer, again?

A. There were other tides that were higher and lower during that year.

Q. A number of them?

A. Yes, sir, quite a number of tides.

Q. What sources of information has your testimony required you to refer to?

A. I have had to refer to the Canadian tide [1060] tables for the year 1952, published by the Canadian Hydrographic Office, and also the tide tables of the——

The Court: So far as his answer depends upon his looking at any Canadian tide tables, as to the objection previously made to the effect that he is reporting information found on records which are not now in evidence and hearsay, the Court's previous ruling is modified so that as to the information having a source in those records, it is sustained and the Court will disregard it.

Mr. Koch: Your Honor, I think perhaps I made it unclear. This witness made the calculations himself, but he had reference data, which is a normal

(Testimony of Joseph M. Kildall.)

thing. I am only asking him to say what the reference data was.

The Court: The objection is sustained on anything that he has answered that depends for its accuracy on his reference to foreign government documents of the kind mentioned. They should be brought here, if you wish them.

Q. Do you have the documents before you?

A. Yes, I have.

The Court: At this time, we will be at recess until 1:30.

(Recess.)

The Court: The witness has returned to the stand for further interrogation. I ask you to expedite the examination. [1061]

(Tide Tables of Pacific Coast of Canada marked Defendant's Exhibit A-44 for identification.)

(Tide Tables of West Coast marked Defendant's Exhibit A-43 for identification.)

Q. Directing your attention to what has been marked Exhibit A-44, will you state what that is?

The Court: If you know.

A. This is the tide tables of the Pacific Coast of Canada, published by the Canadian Hydrographic Office.

Q. Did you use that exhibit in calculating the measurements of the tide, and also your own personal knowledge with respect to which you testified this morning?

A. I did, sir.

Mr. Koch: I will offer that exhibit in evidence.

(Testimony of Joseph M. Kildall.)

The Court: State, if you know, who issued those tide tables.

The Witness: These were issued by the Canadian Hydrographic Service.

The Court: What kind of agency, if it is an agency, is that?

The Witness: It is of the Department of Mines. It is the Surveys and Mapping Branch.

The Court: Of what institution or organization?

The Witness: Department of Mines and Technical Surveys, Ottawa. [1062]

The Court: What nation or province or state or county or city or other kind of an organization of government, if it is any such kind of thing, is that issued by, if you know?

The Witness: Dominion Hydrographer, Canadian Hydrographic Surveys.

The Court: I would like for you to state what you know without reference to that document.

The Witness: All I know is what is given on the table, sir.

The Court: You don't know anything about it yourself differently from that?

The Witness: No, sir, I don't.

Mr. Riley: May I inquire, your Honor?

The Court: You may inquire.

Mr. Riley: Is this document certified or is there attached thereto any type of certificate by a consular officer of the United States or resident of Canada under the seal of his office?

(Testimony of Joseph M. Kildall.)

The Witness: There is a label, "Canada", with a seal of some sort at the top of the table on the front cover.

Mr. Riley: The seal to which the witness refers, of course, is a printed seal. I refer Court and counsel to 28 USCA 1741, which provides: "A copy of any foreign document of record or on file in a [1063] public office of a foreign country or political subdivision thereof, certified by the lawful custodian thereof, shall be admissible in evidence when authenticated by a certificate of a consular officer of the United States resident in such foreign country, under the seal of his office, that the copy has been certified by the lawful custodian."

Mr. Koch: That section counsel quotes is not in point, because that refers to documents on file in a government office. This, however, is a published book. It is my understanding that published documents that are available to the public and are publications of——

The Court: Try to give me some authority for it.

Mr. Koch: I will cite to the Court the case of *Cherry Point Fish Company vs. Nelson*, 25 Wash. 558, which held specifically that tide tables prepared by the United States Government for the use of navigators on the waters of Puget Sound are competent evidence for the purpose of——

The Court: Will you try to find some holding or statute that relates to foreign material?

Mr. Koch: I don't have a statute.

The Court: I wish to have it; otherwise, the

(Testimony of Joseph M. Kildall.)

Court reserves ruling and you will have to produce something before you rest your case in chief.

Q. Referring to what has been marked Exhibit [1064] A-43, will you state what that booklet is?

A. This is the tide tables for the West Coast of the United States, including the Hawaiian Islands.

Q. Does it include Canadian waters?

A. Yes, it does include Canadian waters, and the United States. It is actually North and South America.

Q. By whom is that document prepared?

A. It is prepared by the United States Coast and Geodetic Survey of the United States Department of Commerce.

Q. For what year is that tide table applicable?

A. This is for the year 1952.

Mr. Koch: I will offer that exhibit in evidence.

The Court: Any objection?

Mr. Riley: Yes, your Honor.

The Court: What is it? Let opposing counsel see Exhibit A-43.

Mr. Riley: Do you know whether or not Exhibit A-43 was authenticated by any official of the United States?

The Witness: No, sir, I don't.

Mr. Riley: If the Court please, the exhibit on the face of it shows that it is published by, prepared by the United States Department of Commerce Coast and Geodetic Survey for the year 1952. It does not bear an authentication, I believe.

(Testimony of Joseph M. Kildall.)

The Court: As required by what? [1065]

Mr. Riley: Section 1733 (b) of Title 28, which states: "Properly authenticated copies or transcripts of any books, records, papers or documents of any department or agency of the United States shall be admitted in evidence equally with the originals thereof." I believe that the document on the face of it is inadmissible.

The Court: Have you anything to say?

Mr. Koch: Yes, your Honor. The statute counsel refers to——

The Court: I ask you to show me something on which the Court can rely.

Mr. Koch: The statute upon which counsel relies is a statute which refers only to properly authenticated copies or transcripts of books. It specifically states that such copies shall be admitted equally with the originals thereof. This is a Government publication. This is available, it is prepared by the Government. It is in the same category with the Warsaw Convention and the treaty series which counsel presented to the Court.

The Court: Will you look at the provisions of subsection (a) of Section 1733? "Books or records of account or minutes of proceedings of any department or agency of the United States shall be admissible to prove the act, transaction or occurrence as a memorandum of which the same were made or kept." [1066]

Mr. Koch: And that also holds to the same effect I have cited.

(Testimony of Joseph M. Kildall.)

The Court: The objections to A-43 are overruled. Defendant's Exhibit A-43 for identification is now admitted. You may proceed.

(Defendant's Exhibit A-43 for identification received in evidence.)

Q. Mr. Kildall, did you make calculations based upon the American tide table which is Exhibit A-43? A. Yes, I did.

Q. Did you make computations as to the height of the tide on January 19, 1952, at approximately 1:40 A.M.? A. Yes, sir, I did.

Q. What was the height of the tide according to that table and your computations at that time?

A. The height of the tide was 12 feet.

Q. Was it rising or falling?

A. It was rising at this time.

Q. Can you state the rate of rise?

A. The rate of rise was approximately two feet per hour.

Q. With reference to the same table, did you make calculations on June 9, 1952, at low tide?

A. Yes, sir, I did.

Q. What was the low tide on the morning of June 9, 1952?

A. On June 9, 1952, the A.M. low water was 1.1 feet plus. [1067]

Q. Plus what?

A. Plus 1.1 feet. It was above the zero point. It was 1.1 feet.

Q. How does the zero point relate to the zero point on your prior testimony?

(Testimony of Joseph M. Kildall.)

A. It is one and the same point.

Q. That is the low water mark, is it?

A. For that area, the low water mark is fixed.

Q. Did you check the table and make calculations relative to tides, the height of low tide at other dates during the year?

A. I found that there were other tides lower during the year. There were tides in January, some in July, and some in August that were somewhat lower than that tide.

Q. Can you state whether or not the ordinary low tide would be the tide at a point where it reached zero, or neither a plus or minus reading?

A. The normal low tide, in most cases, would run very close to zero, because all calculations attempt to have all tides come out as positive figures for each area.

Q. Do you know whether or not that zero point is determined with the years of study of the low water, as you testified this morning, on the American table?

A. Yes, sir. The points are the same.

Mr. Koch: I have no further questions. [1068]

Mr. Riley: No questions, your Honor.

The Court: You may step down.

(The witness was excused.)

The Court: Call the next witness.

Mr. Koch: May this witness be excused?

Mr. Riley: No objection.

The Court: Captain Kildall is excused.

Mr. Koch: That is the end of the defendant's case, your Honor.

The Court: Does the defendant rest?

Mr. Koch: Yes, your Honor.

The Court: Is there any rebuttal?

Mr. Riley: Very briefly, your Honor. Call Mr. Cunningham.

Mr. Koch: Your Honor, the clerk points out that the Court reserved ruling with respect to the admissibility of the Canadian tide tables.

The Court: I said I would reserve ruling until counsel before the end of counsel's case in chief showed some authority for admitting it upon the proof offered, and if you haven't any——

Mr. Koch: The only authority I have is the case I cited to the Court which made a reference to the American tide table, but it did admit a tide table covering the area, your Honor. [1069]

The Court: The Court's ruling will stand. It is now made absolute, and the objection to Defendant's Exhibit A-44 for identification, after opening up the defendant's case in chief for the purpose of considering this exhibit further, is now sustained. The Court does now confirm permanently the Court's previous ruling that the objection be sustained, that it is now sustained, and the Court rejects the offer for admission of Defendant's Exhibit A-44 for identification.

Does the defendant now rest?

Mr. Koch: Yes, your Honor.

The Court: I understand it does. Let the record so show. [1070]

JOHN CUNNINGHAM

called as a witness in rebuttal by plaintiffs, was sworn and testified as follows:

Direct Examination

By Mr. Riley:

The Court: What is the witness' name?

The Witness: John Ritchie Cunningham.

The Court: This witness, called as a part of plaintiffs' rebuttal, may now be interrogated.

Q. Where do you reside?

A. In Vancouver, British Columbia.

Q. What is your occupation?

A. I am a barrister and solicitor.

Q. With what firm are you associated?

A. I am a partner in the firm of Macrae, McMurdo, Macrae, Hill and Cunningham.

Q. How long have you been associated with that firm as a partner?

A. With that firm and the predecessor firm for a period of approximately six years.

Q. Would you state your background as a solicitor and barrister, in what courts you have appeared and are admitted to practice before in Canada?

A. I have been admitted to practice in all the courts in Canada, and have appeared in all the courts in British Columbia and in the Supreme Court of Canada.

Q. Do you practice any specialty in the law?

A. I have a specialty in shipping and admiralty.

Q. Are you a member of any association committee of any particular specialties?

(Testimony of John Cunningham.)

A. I am chairman of the present Maritime Law Subsection of the Canadian Bar Association for British Columbia, and a member of the Air Law Subsection for British Columbia for the Canadian Bar Association.

Q. Would you trace for us your legal education and the period of time you have practiced since the completion of that education?

A. I took two years at the University of British Columbia before joining the Canadian Navy in 1942, and after the war completed a Bachelor of Laws degree at the University of British Columbia. I was called to the bar and admitted as a solicitor in July 1948, and have been practicing ever since.

Q. I will ask you to assume that in January 1952 a United States airplane operated by a United States corporation, Northwest Orient Airlines, Inc., pursuant to a contract with the United States Government, Department of the Air Force, left Japan with passengers for the United States, and [1072] after leaving Anchorage, Alaska, attempted to make an emergency landing at the airstrip at Sandspit, British Columbia, but instead crashed into open water at a point approximately one-half to three-quarters of a mile from shore; and ask you to assume further that one of the passengers, a United States citizen, died, leaving surviving a wife and an infant child; and assume further that the said death was caused by the wrongful act or acts of the carrier, Northwest Airlines, Inc.; and assume further that the administratrix of the deceased's

(Testimony of John Cunningham.)

allegations of the complaint; it has to stay within the limits of the evidence received in the case, whether the evidence tends to support the allegations of the complaint or not.

Mr. Koch: But it was admitted, your Honor, so that as far as the trial of this case was concerned, my understanding is that when an allegation is made in the complaint and admitted in the answer, it is no longer at issue in the case.

The Court: If it happens to be connected in any [1075] way with an affirmative defense not admitted, it may be received. The mere fact that the plaintiff does not in the plaintiff's complaint specifically allege the facts in accordance with the evidence received, if there has been evidence received in support of an affirmative defense, then rebuttal evidence of such affirmative defense, supporting evidence, may be received. It seems to me that it may be.

Mr. Koch: I recall only the testimony of Mr. Leonard, Mr. Sanders and Mr. Cox relating to the location of the plane as one-half mile from the shore adjacent to the Sandspit runway, and I think that this is a critical point, and the hypothetical question should be strictly limited to the evidence.

The Court: That is what the Court requires specifically. I ask you, do you contend that there is any evidence in the case, no matter by whom adduced, that the distance away was what you stated in the supposititious question?

Mr. Riley: Yes, your Honor.

(Testimony of John Cunningham.)

The Court: Was any of it stated in support of the affirmative defense?

Mr. Riley: Well, Mr. Cox and Mr. Leonard and Mr. Sanders all testified that the aircraft crashed approximately one-half to three-quarters [1076] of a mile offshore from the runway at Sandspit, British Columbia, in the waters of Hecate Strait, and that is simply what I have stated in my hypothetical question.

The Court: You did not state more than that?

Mr. Riley: I will reread that portion of the hypothetical question.

(Last question read by reporter.)

Mr. Koch: I state the testimony of those witnesses, plus Mr. Matthews, all put the crash site as one-half mile offshore.

The Court: The objection is overruled, for the purpose of rebuttal only, not for the purpose of supporting the allegations of the complaint. This supposititious question may be propounded to this witness, the objection thereto being overruled. Does the witness have to have the question restated? If so, the Court will gladly have it done.

The Witness: No, your Honor. My opinion is that the said Act would not be applicable.

Q. And would you state why you have so concluded?

A. The Families' Compensation Act——

Mr. Koch: Just a moment, please. Now, again I must object, your Honor, because it would appear that there is now an attempt to establish the appli-

(Testimony of John Cunningham.)

cability, perhaps, at least as far as I can tell from [1077] the question, of some other law, and, if so, that is certainly not in rebuttal to the proof in support of the affirmative defense.

Mr. Riley: This is strictly in rebuttal. We are not trying to prove any law.

The Court: The objection is overruled. You may state your reasons.

The Witness: The Families' Compensation Act of British Columbia has no extra-territorial operation, and the territorial jurisdiction of Canada and the right of the province ends at low water mark, at low water, and under the stated facts and in view of that fact, that is one reason.

The second reason is that even if the wrongful act or acts of negligence occurred above low water, under our law the tort is deemed to be committed where the wrongful acts take place and not necessarily where the injury is received. Even if the wrongful act or acts occurred in the air or in British Columbia, it would be my opinion in the facts stated, including the fact that the deceased was a United States citizen, the aircraft was a United States aircraft, and the corporate aircraft carrier was domiciled in the United States, that the court in British Columbia would apply the law of the United States. Also——

Mr. Koch: I don't think this is responsive. [1078]

The Court: I believe that is sufficient.

Mr. Riley: I have no further questions, if the Court please.

(Testimony of John Cunningham.)

The Court: You may cross examine.

Mr. Koch: May I have a moment to confer with Mr. Bird, your Honor?

The Court: Yes, you may.

Cross Examination

Q. (By Mr. Koch): Isn't it true that if the accident took place above the low water mark, that then the matter would not involve the extra-territorial application of the Families' Compensation Act? A. The——

Q. Either yes or no. A. No.

Q. Your answer is no, that the Families' Compensation Act would still not be applicable?

A. It still would not be applicable. It relates to the commission of the tort.

Q. I am not referring to that part of your testimony. You said that the Families' Compensation Act does not have extra-territorial force?

A. Operation. [1079]

Q. Does the Families' Compensation Act operate to low water mark, from the shore outward to low water mark?

A. That is correct. That is the extent of the British Columbia territorial jurisdiction.

Q. So if the accident happened at or above low water mark, the Families' Compensation Act, if it were otherwise applicable, would apply?

Mr. Riley: I object. That is outside the scope of direct examination. He is using the term

(Testimony of John Cunningham.)

“would”. The allegation on the defendant’s affirmative defense is “could” apply.

The Court: The objection is sustained.

Q. Does the Families’ Compensation Act apply in the territory of British Columbia down to low water mark in cases in which the Act is properly invoked?

Mr. Riley: I will restate the same objection.

The Court: The objection is overruled. You may answer this time, but not any more than this time. You have already answered once.

The Witness: I believe I have answered that the territorial jurisdiction of the province extends down to the low water mark, and the Families’ Compensation Act, those sections are part of a provincial statute.

Q. If I understood your statement near the end of your direct examination, you stated that the tort [1080] is where the wrongful act takes place?

A. That is my opinion, and that is the law.

The Court: Is that your opinion under the provisions of Canadian law?

The Witness: Canadian law applying English law.

Q. What Canadian authorities support that view?

A. There is a case, *George Monroe, Ltd., vs. American Cyanamid Corporation, Ltd.*, 1944, 1 King’s Bench 432, which has been approved in a conflict of law text, and the case itself has been referred to in British Columbia courts.

(Testimony of John Cunningham.)

Q. Is that a British Columbia decision?

A. That is a decision of the Court of Appeals in England, I believe.

Q. Is that a decision binding on the British Columbia courts?

A. It is not necessarily binding, but it is my opinion it would be followed by the British Columbia courts.

Q. We are only concerned with what the controlling authority is in British Columbia. Is there any British Columbia case on that subject so holding?

A. The American Cyanamid case has been quoted and referred to in a British Columbia case.

Q. Is there any decision holding that the tort is where the wrongful act takes place, decided by a court of last appeal in British Columbia?

A. There may be, but I cannot cite it if there [1081] is one, and I do not know it.

Q. Can you cite a Supreme Court of Canada decision to that effect? A. No, I cannot.

Q. Are there decisions in British Columbia or from the Supreme Court of Canada holding that the law of the place where the impact occurs is the law which shall be applied in determining the situs of the tort?

Mr. Riley: If the Court please, counsel is going way beyond the scope of direct examination. Unless he is directing these questions for the purpose of impeaching our witness, I think that they should be objected to and he should be stopped from in-

(Testimony of John Cunningham.)

quiring further along this line. He has not alleged himself what the substantive law or what the construction of Canadian law is. He has alleged simply two sections of the statute could be applicable. He has alleged none of the cases or any case law referring to any of it, and this is outside of our evidence, which is offered strictly in rebuttal of that which he offered.

The Court: If he seeks to find if there is any court construction of statute law which is pleaded, the Court overrules the objection, if that is the purpose of it.

Mr. Koch: Yes, your Honor. I didn't think I was going beyond it. The question Mr. Riley asked elicited the answer the tort is where the wrongful act takes place. [1082] I am trying to find out if there isn't——

The Court: The objection is overruled.

The Witness: My answer would be that the facts would determine where the wrongful act took place. There may be facts where an impact is——

Q. That is not an answer to my question. Read the question, please.

(Last question read by reporter.)

A. You refer to an impact? You mean an aircraft impact or—I am afraid that I cannot in my own mind place impact and wrongful act together.

Q. Let me see if I can explain what I mean. I understood you to testify that the——

The Court: I would rather you would not do that. Ask him a question, will you, please?

(Testimony of John Cunningham.)

Q. When you say the tort is where the wrongful act takes place, what do you mean by wrongful act?

A. Is that not a matter of fact?

Q. Are you talking about the negligence of the carrier, or the place where all that culminated in injury?

A. I am referring to a wrongful act. I am not defining what a wrongful act is. I have not heard the conduct, if you are referring to this particular case.

Q. Is it your understanding that the conflicts of law rule applicable in the case of torts is that the court shall [1083] apply the law of the place where the injury is caused, where the injury takes place?

A. No, where the wrongful act took place.

Q. Are there cases in British Columbia or in the Supreme Court of Canada that hold that the conflicts rule to be applied there shall be the law of the place where those negligent acts resulting in injury and the injury——

A. Perhaps if I could refer to the Cyanamid case to illustrate——

Q. Just answer the question. Are there cases to hold it is the place of impact, the place where the injury was caused, that determines the law applicable, the law of that place is the law applicable to the tort?

A. If the wrongful act took place in the same place, there presumably would be decisions.

Q. I will ask it one other way. If negligence takes place in Washington and it culminates in

(Testimony of John Cunningham.)

injury and damage to a plaintiff in British Columbia, will the British Columbia law apply the law of British Columbia or the law of Washington?

A. Well, the conflicts rule arising out of this Cyanamid case is to the effect that where there are acts leading to an injury in one place, the plaintiff has the choice in that case of the——

Q. This is a decision in England many years ago. I am trying [1084] to find out if there are any laws in British Columbia or the Supreme Court of Canada which would answer the question I have just propounded.

Mr. Riley: I will object. That question has been asked six times.

The Court: I think he said previously what his opinion was, but you may repeat what your opinion is.

Mr. Koch: Your Honor, I am not asking his opinion. I am asking him his knowledge of the authorities on this point.

The Court: I don't see how you could separate it from his opinion as to what the fact is.

Mr. Koch: I want to know if there are cases in British Columbia or——

The Court: He might think the case did, and you might think that case didn't.

Mr. Koch: I have authority with respect to this that I would like to cite to the Court, if the Court wishes.

The Court: I do not. Proceed.

(Testimony of John Cunningham.)

Mr. Koch: His opinion is not relevant. It is only what the decisions are.

The Witness: I am basing my——

The Court: Proceed.

Mr. Koch: Read the question, please.

(Last question read by reporter.) [1085]

The Witness: It would be a matter for the court to determine, where the wrongful acts took place.

Mr. Koch: I have no further questions.

Mr. Riley: I have no further questions.

The Court: Do you wish this witness to be excused?

Mr. Riley: Yes, your Honor. I would like to take exception to the defendant's witness conferring with counsel at counsel table.

The Court: The Court asks defendant's counsel to give attention. This witness, like the other witness who was a member of the Canadian Bar, or the Bar of British Columbia, is excused with the Court's statement that it is always a pleasure to have appear in this Court any member of the British Columbia Bar. I ask both the witness Cunningham and the witness Bird to extend my warmest respects to Mr. Justice Sidney Smith of your Admiralty Court.

Mr. Cunningham: We will be very happy to do so, your Honor. Thank you.

(The witness was excused.)

The Court: Call the next rebuttal witness.

Mr. Riley: That concludes our rebuttal, if the Court please.

The Court: Do the plaintiffs rest?

Mr. Riley: Plaintiffs do rest, if the Court please.

The Court: Does the defendant rest?

Mr. Koch: May I confer for just a moment?

The Court: You may confer with your co-counsel.

Mr. Koch: I will call Mr. Bird.

Mr. Riley: I will take exception to recalling Mr. Bird, unless it is—I take exception, period.

The Court: You will have to state for what purpose you wish to pursue surrebuttal.

Mr. Koch: I wish to ask him whether his views of the law differ from those expressed by——

The Court: He has already given his views originally.

Mr. Koch: Not on this last point, about what law applies to the wrongful act.

The Court: I call attention to the fact that the plaintiffs have the right to close the offering and giving of testimony in this case.

Mr. Koch: Your Honor, if the Court is ruling that I cannot call Mr. Bird, I wish to take exception and make an offer of proof.

The Court: I wish to call attention to the fact that the plaintiffs have the right to call the last witness in this case, if the plaintiffs wish to, and if you are given the opportunity of adducing surrebuttal, the plaintiffs will have the right to offer sur-surrebuttal. Do you understand that? [1087]

Mr. Koch: I appreciate that. I want to ask one question.

The Court: Let that witness come forward in surrebuttal. [1088]

JOHN IRVINE BIRD

recalled as a witness in surrebuttal by defendant, was sworn and testified as follows:

Direct Examination

Q. (By Mr. Koch): Mr. Bird, if negligence takes place in the State of Washington culminating in injury and impact to a party in British Columbia, and litigation involving that circumstance is before the courts of British Columbia, what tort law would the British Columbia court apply?

A. It would apply the law of British Columbia where the death or injury occurred.

Q. And if it were only an injury, what then?

A. It would apply the same law.

Q. Can you explain your answer?

Mr. Riley: I will object. Counsel is going completely outside of the rebuttal.

The Court: I believe the Court will not hear any more explanation. The objection is sustained. The Court will consider his answer.

Q. Under those circumstances, would the court in British Columbia have an option of applying the law of the United States in the conflicts of law situation that would be [1089] presented?

A. Not in a tort action. It would apply the law of the place where the death or injury occurred.

Mr. Koch: I have no further questions.

(Testimony of John Irvine Bird.)

Cross Examination

Q. (By Mr. Riley): Would not the courts of British Columbia ordinarily follow the King's Bench decision if the King's Bench decision were in conflict with the highest court of the Province of British Columbia decision?

A. Oh, no. It is not bound by a King's Bench decision in England, if I understood you correctly.

Q. Is it not true that they would ordinarily follow a King's Bench decision?

A. No. They are bound only by the Privy Council on appeals coming from Canada.

Mr. Riley: I have no further questions.

Mr. Koch: I have no further questions.

The Court: The witness is excused.

(The witness was excused.) [1090]

The Court: Does the defendant rest?

Mr. Koch: Yes, your Honor.

Mr. Riley: May I confer a moment?

The Court: You may do so.

Mr. Riley: We would like to recall for one question Mr. Cunningham.

The Court: The plaintiffs may in sur-surrebuttal recall that witness. This will terminate the taking of testimony. [1091]

JOHN CUNNINGHAM

recalled as a witness in sur-surrebuttal by the plaintiffs, was examined and testified as follows:

Direct Examination

Q. (By Mr. Riley): Mr. Cunningham, you have

(Testimony of John Cunningham.)

stated several reasons why in your opinion Sections 3 and 5 of the British Columbia Families' Compensation Act would not apply in the state of facts recited earlier. Do you have any other reason?

Mr. Koch: I object to that statement of the question.

The Court: The objection is sustained. Just ask him a question or call his attention to one thing that you understood him to say, and ask him if he did say it, and then propound the question. In other words, the Court might not take the view of what he said which you have just recited.

Q. Do you have any other reasons why Sections 3 and 5 of the British Columbia Families' Compensation Act——

Mr. Koch: I object, your Honor.

The Court: That is not proper. Please call his attention to something you wish cleared up, if it has been said or if it held a fact so-and-so, based upon what you think some witness has said that is controverted by some [1092] other witness. You may pursue it in that fashion.

Q. Mr. Cunningham, calling your attention to your testimony earlier wherein——

The Court: That may not be done in surrebuttal. It should be something that was developed in surrebuttal, Mr. Riley, some conflict that arose further by reason of the surrebuttal.

Mr. Riley: Yes, your Honor.

Q. Do the courts of the provinces of Canada ordinarily follow decisions of the King's Bench?

(Testimony of John Cunningham.)

Mr. Koch: Just a moment. That is a very leading statement.

The Court: The objection is overruled.

A. The Courts in British Columbia would be persuaded by higher courts in England, but they are not bound by them.

The Court: You should say specifically whether that is true with the King's Bench decisions.

The Witness: They would not be bound by the King's Bench decisions.

Q. In the absence of any other decisions in British Columbia as to a point of law which has been passed upon by a decision of the King's Bench, would the King's Bench decision be a guide to the British Columbia court?

Mr. Koch: Before you answer, I object to the statement of the question and to the attempt to elicit an [1093] opinion. He can only ask what the authorities are, what the decisions are, without what this witness believes would happen.

The Court: The objection is overruled.

The Witness: I can only say that that would be persuasive and may be followed. The courts in British Columbia are not bound.

Mr. Riley: I have no further questions.

Mr. Koch: No questions.

The Court: You may step down.

(The witness was excused.)

Mr. Riley: I have nothing further. Plaintiffs do rest in each case.

The Court: Does the defendant rest?

Mr. Koch: Yes, your Honor.

The Court: All witnesses in this case and all others attending the trial other than the parties and counsel may now be excused. The taking of testimony is ended.

(Discussion among Court and counsel re length of arguments.)

(Arguments of counsel.)

(Court's decision previously furnished.)

[Endorsed]: Filed Aug. 13, 1957.

[Title of District Court and Cause.]

DEPOSITION OF LEE ROY WALDREP

Taken at Jasper, Alabama, offices of Elliott & Jackson, Attorneys, March 1, 1957, 10:45 A.M.

Appearances: Hon. Hoyt Elliott, Elliott & Jackson, Attorneys, Jasper, Ala. Hon. Bibb Allen, 1103 Comer Building, Birmingham, Alabama. [1]

Stipulation

Dictated by Mr. Allen: It is hereby stipulated between the parties that all objections, except as to form of the question, be reserved until the time of trial.

LEE ROY WALDREP

having been first duly sworn, testified as follows on

Examination

Q. (By Mr. Elliott): State your name, please?

A. L. R. Waldrep.

Q. Those are your initials?

(Deposition of Lee Roy Waldrep.)

A. Yes, my full name is Lee Roy.

Q. How do you spell that?

A. Capital L-e-e, Capital R-o-y, W-a-l-d-r-e-p.

Q. Where do you live, Mr. Waldrep?

A. 1900 Tenth Avenue, Jasper, Alabama.

Q. How long have you lived there?

A. Since 1930, twenty-six years.

Q. At the same address? A. Yes, sir.

Q. What relation, if any, are you to John M. Waldrep? A. Father.

Q. What does the "M." in his name stand for?

A. Milton. M-i-l-t-o-n.

Q. Is he still living? [2] A. No.

Q. How long has he been dead?

A. Since January 19, 1952.

Q. When was he born?

A. August 11, 1927.

Q. How old was he at the time of his death?

A. I would have to figure that—twenty-four I believe.

Q. You think that is the age he was at the time of his death? A. Yes.

Q. What occupation, if you know, was he engaged in at the time of his death?

A. He was in the United States Army.

Q. Had he lived with you from the time of his birth up until the time he entered military service?

A. Yes, sir.

Q. I will ask you to tell the Court Reporter here what educational courses he took, if any, beginning with his first years in school, and where he went.

(Deposition of Lee Roy Waldrep.)

A. He attended Central Elementary School——

Q. That is here in Jasper?

A. Yes. And two years at Walker County high school.

Q. Was that before he went into any kind of service? A. Yes, sir.

Q. When did he discontinue his educational program if you remember, at what age?

A. Sixteen. [3]

Q. Prior to stopping school, had he been employed anywhere that you know of?

A. No, sir.

Q. During those years between childhood and through the age of sixteen, he was living in the home with you? A. Yes, sir.

Q. You say he finished elementary school, and how many years of high school? A. Two.

Q. That would have made him through what grade in school?

A. That would have been the tenth, wouldn't it?

Q. During that period of time, did you have occasion and opportunity to observe his physical condition and the state of his health, as to whether or not he was subject to any disease?

A. I did.

Q. Did he have any diseases that you know of?

A. No, sir.

Q. Did he have any of the childhood diseases so far as you can remember?

A. I believe he had whooping cough, and measles, that is all I remember.

(Deposition of Lee Roy Waldrep.)

Q. Was he treated by a doctor for those childhood diseases, or do you remember?

A. I think maybe the family doctor saw him, several members [4] of the family was sick and he saw them all at the same time.

Q. Did you have an opportunity to observe him in his physical activities after he had those childhood diseases? A. Yes, sir.

Q. Did you observe anything wrong with him, so far as you could tell? A. No, sir.

Q. Did he have any disabling effects, so far as you could tell? A. No, sir.

Q. Was he ever involved in any accidents?

A. No, sir.

Q. How tall was he?

A. I believe the record shows seventy inches, I just looked at his discharge over there.

Q. That would be five feet ten inches?

A. Yes, sir.

Q. Was he apparently in good health?

A. He certainly was.

Mr. Allen: Are you talking about before he entered the service?

The Witness: Yes, sir.

Q. That was the time just when he finished the last grade in school? A. Yes, sir.

Q. Where did he go after he left school? [5]

A. He joined the Merchant Marines.

Q. Where did he join the Merchant Marines?

A. I am not sure, I think Mobile—or Pensacola.

(Deposition of Lee Roy Waldrep.)

Q. Do you know who he worked for in the Merchant Marines?

A. No, I don't remember the Company.

Q. Do you know how old he was when he joined the Merchant Marines? A. Sixteen.

Q. Was it necessary for you to sign a consent in order for him to join? A. Yes, sir.

Q. Did you sign that consent?

A. Yes, sir.

Q. How long did he continue in the Merchant Marines? A. Two years.

Q. Was he at home from time to time during that period?

A. He was at home two or three times, he wasn't at home very much during that time, he was in the Pacific most of the time.

Q. Did you see him at the times he was home?

A. Yes, sir.

Q. So far as you could tell, was he in good health during that time? A. He was.

Q. Did he sign up for any definite length of time when he went with the Merchant Marines?

A. I think it was two years, but I wouldn't be positive. [6]

Q. Did he stay with the Merchant Marines two years? A. Yes, sir, approximately.

Q. Do you know anything about the circumstances under which he separated from the Merchant Marines, as to whether or not he was in good standing at that time?

(Deposition of Lee Roy Waldrep.)

A. He was in good standing.

Q. Do you know anything about his earnings during that period of time?

A. No, sir, I couldn't testify as to that.

Q. Do you know anything about the pay rating in the Merchant Marines, as to whether or not they have definite pay grades?

A. Of my own knowledge I would say I do not.

Q. But he did continue with them for a period of two years, and his work was satisfactory, so far as you know?

Mr. Allen: I object to the question in the suggested form.

A. Yes, sir.

Q. Was he married during that period of service in the Merchant Marines? A. No, sir.

Q. What year did he enter the U. S. Merchant Marines, if you know? A. 1943.

Q. And he remained with them two years.

A. Yes, sir.

Q. He was discharged from the Merchant Marines in what year? [7]

A. I believe it was in the spring of 1946, my best recollection.

Q. Did he return home when he was discharged?

A. Yes, sir.

Q. Did he come back and reside with you in your home in Jasper, Alabama?

Mr. Allen: I object, leading and suggestive.

A. Yes, sir.

Q. Where did he go after he was discharged?

(Deposition of Lee Roy Waldrep.)

A. He came home.

Q. Did you observe him after his return home?

A. Yes, he was a member of the family.

Q. Did he appear in good physical health?

A. Yes, he did.

Q. Had he lost weight, or gained weight, or do you remember any change?

A. He had gained some weight, I don't know how much.

Q. Did he wear glasses? A. No.

Q. How long did he stay in the home with you after he returned from the Merchant Marines?

A. Approximately five or six months.

Q. Did he work any during that period of time?

A. Yes, sir.

Q. Where did he work, if you know. [8]

A. He worked with me, I was farming at that time.

Q. What kind of work did he do?

A. General farm work, plowing, cultivating, planting, and building pastures, just general farming.

Q. Did you pay him on any kind of a pay basis during that period?

A. No, not a stipulated salary, I did pay him some, but it varied.

Q. Was he residing in your home at that time?

A. Yes.

Q. Were you charging him anything for his room and board during that period of time?

(Deposition of Lee Roy Waldrep.)

A. No, he was more or less considered a member of the family, there was no specific charge.

Q. Do you remember how much you paid him over and above his room and board?

A. I imagine on an average of fifteen or twenty dollars a week.

Q. Was that throughout the period of five or six months you have testified about?

A. Yes, sir.

Q. At the end of that period of time, so far as you know, was his physical condition good?

A. Yes, sir.

Q. Had he been sick during that period of time? A. No.

Q. Had he been to any doctors that you know of? [9] A. No.

Q. Had he been in any accidents, or disabled in any way? A. No.

Q. What did he do or where did he go following that period of time?

A. He enlisted in the U. S. Marines.

Q. Where did he enlist?

A. In Birmingham.

Q. In the United States Marine Corps?

A. Yes, sir.

Q. When was that?

A. The 15th day of July, 1946. That is a matter of record in the court house.

Q. How old was he at that time, if you remember? A. He would have been seventeen——

(Deposition of Lee Roy Waldrep.)

Q. You know the date of his birth, you can use a pencil there.

A. I believe he would have been nineteen in August following.

Q. Following the date of his enlistment?

A. Yes.

Q. Was it necessary to give your consent to his enlistment?

A. No, I didn't give my consent because he was over eighteen.

Q. Do you know for how long a period of time he enlisted? A. Two years.

Q. Do you know where he was stationed during that period of time? [10]

A. Camp LeJeune, North Carolina.

Q. Do you know how to spell it?

A. L-e-J-u-e-n-e.

Q. Did he stay at Camp LeJuene during the period of his enlistment?

A. I believe he did.

Q. Was he at home any during the period of his enlistment?

A. He came home two or three times.

Q. Do you know anything about the nature of the training he had during that period?

A. No, I know what his job was, he was in the Fire Fighters Squadron.

Q. Do you know whether he underwent the usual Marine Corps basic training?

A. Yes, sir.

Q. Was he in the hospital during that period

(Deposition of Lee Roy Waldrep.)

of time, so far as you know? A. No.

Q. Was he sick any during that period of time, so far as you know?

A. Not that I know of.

Q. Did he start wearing glasses during that period of time? A. He never wore glasses.

Q. Did you have occasion to see him when he would come home on leave from his training in the Marine Corps? [11] A. Yes, sir.

Q. Was he in good physical condition?

A. He was.

Q. Did he do any work for you when he was on leave from the Marine Corps? A. Yes, sir.

Q. What kind of work did he do?

A. Farm work. General farm work, in the crop.

Q. Did he plow? A. Yes, sir.

Q. Did he do any gathering of any crops?

A. I couldn't be positive whether he was at home during gathering time.

Q. What was the average hours per day he would work when he was plowing?

A. He worked long hours.

Q. How many, would you say?

A. At least twelve hours.

Q. Would he plow for full twelve hours?

A. Yes, sir.

Q. Did he have any trouble holding up for that length of time? A. No, sir.

Q. Was he then later discharged from the Marine Corps? A. Yes, sir.

(Deposition of Lee Roy Waldrep.)

Q. Did he receive an honorable discharge? [12]

A. Yes, he received an honorable discharge on January 30, 1948.

Q. Did he return home following his discharge from the Marine Corps? A. He did.

Q. How long did he live with you at that time?

A. I would say about eight months.

Q. That is following his Marine Corps service?

A. Yes, the U. S. Marine Corps.

Q. Did he work anywhere during that period of eight months? A. Yes, sir.

Q. Did he attend school any during that eight months period? A. Yes, sir.

Q. Where did he go to school?

A. Walker County high school.

Q. Do you know what grade he entered in the Walker County high school? A. No, I don't.

Q. Had he finished, prior to the time he discontinued his education and went into the Merchant Marines—you testified that a while ago—he had finished what grade?

A. My recollection is, the tenth.

Q. After he returned from the Marine Corps, and went back to school, how many grades did he complete if you know? A. I don't know. [13]

Q. How long did he go to school?

A. My recollection is he went from about January of 1948—no—January of 1949—until along in the summer.

Q. He was going to school under the G.I. Bill, was he not?

(Deposition of Lee Roy Waldrep.)

A. Yes, he was going to school and working. He was going to school at night, and working for Vines Brothers Motor Company as a mechanic during the day.

Q. Do you know how much progress in his grades he made during the time he attended school?

A. No, I don't know, anything I would say about that would be a guess.

Q. Do you know whether he finished high school or not? A. No, I don't.

Q. How long did he work for Vines Brothers Motor Company?

A. I would say six to eight months.

Q. Did you know how much he was making?

A. Yes, I saw some of his pay envelopes, I believe they run from \$25.00 to \$30.00 a week, they varied some I think on account of the number of hours he worked.

Q. Was that tied in with his G.I. training program? A. I understand it was.

Q. During that period when he was working for Vines Brothers Motor Company, was he also going to G.I. night school? A. He was.

Q. And what he was receiving from G.I. night school was in [14] addition to his pay from Vines Brothers Motors, or do you know?

A. I understand that it was in addition.

Q. What kind of work did he do for Vines Brothers Motor Co.? A. He was a mechanic.

Q. Was he doing any work for you during that period of time?

(Deposition of Lee Roy Waldrep.)

A. Not during that period.

Q. Was he staying in the home with you?

A. Yes, sir.

Q. Did you see him frequently?

A. I did.

Q. He ate his meals with you? A. Yes, sir.

Q. And slept in your house? A. Yes, sir.

Q. Did you have an opportunity to observe his physical condition? A. I did.

Q. Did it appear to be good?

A. Yes, sir.

Q. Was he sick any during that eight months period? A. No, sir.

Q. Did he have any accidents that you know of?

A. No, sir.

Q. At the end of that six months period, what happened after that? [15]

A. He joined the U. S. Army.

Q. That was about when?

A. Approximately—it was autumn of 1949, early fall I would say or late summer, I don't have the date on that but it was either late summer or early fall.

Q. How old are you, Mr. Waldrep?

A. Sixty-seven.

Q. How many children do you have living at this time? A. Nine.

Q. With John Milton Waldrep you had ten children? A. Yes, sir.

Q. Any of them deceased?

A. None except him.

(Deposition of Lee Roy Waldrep.)

Q. All living except him? A. That's right.

Q. Do you know the circumstances under which he entered the service this last period you started to testify about—did he enlist? A. Yes, sir.

Q. Do you know what branch of the service he enlisted in? A. The army.

Q. Do you know how long his enlistment was?

A. Four years, I believe.

Q. Do you know where he went at the time he enlisted? A. Fort Jackson, South Carolina.

Q. How long did he remain there?

A. I couldn't say, it would have to be a guess.

Q. Do you know where he went following his period at Fort Jackson?

A. No, I don't remember where he went from there, but I know he ended up in El Paso, Texas.

Q. Did you have occasion to see him between the time he entered the service and the time he went to El Paso? A. Yes, sir.

Q. Did you observe his physical condition?

A. Yes.

Q. Did he appear to be in good physical condition? A. Yes, sir.

Q. Was he in the hospital any that you know of? A. No.

Q. Did he marry while he was stationed in El Paso? A. He did.

Q. To whom did he get married?

A. Fay Kelly.

Q. Had he ever been married prior to that time?

A. No, sir.

(Deposition of Lee Roy Waldrep.)

Q. How long was it following the date he married Fay Kelly until he was transferred from his station in El Paso?

A. He married in the spring, before Easter, and my best recollection is that he went overseas, to Korea, the following fall. I couldn't give you the dates, I couldn't [17] be positive even to the month.

Q. How long was he in Korea?

A. I would say approximately three or four months.

Q. Where did he go from Korea, if you know?

* * * * *

Q. Had his wife remained in Texas during that period of time after he left for Korea?

A. She did.

Q. What was the nature of the emergency bringing him home in 1952, if you know?

A. Premature birth of the baby.

Q. That is the child of the marriage of Fay Kelly and John M. Waldrep, your son?

A. Yes, sir.

Q. Was that child born before he got back to the State, or after?

A. It was born after his death.

Q. When was he killed?

A. January 19, 1952. [18]

* * * * *

Q. I will ask you if it isn't a fact that he was on his way home from Korea in January 1952?

(Deposition of Lee Roy Waldrep.)

Mr. Allen: I object to that, leading and suggestive.

Q. How do you know, if you do know, that he was on his way home from Korea in 1952?

Mr. Allen: I object to that, leading and suggestive. A. I did know he was on his way home.

Q. How did you know?

A. By his wife's mother calling me on the telephone.

* * * * *

Q. Did you get any word from any source of the crash?

Mr. Allen: I object, leading and suggestive.

A. Yes, sir.

Q. What was the nature of the information you received regarding an airplane crash?

Mr. Allen: I object, leading and suggestive.

A. I got a telegram from the War Department.

Q. What did that telegram state? [19]

* * * * *

Q. His wife was living at that time?

A. Yes.

Q. Had her child been born at that time?

A. No.

Q. Had your son had any previous marriages, before the marriage to Fay Kelly? A. No, sir.

Q. Was the child later born? A. Yes, sir.

Q. What was the child named?

A. Judith Anne.

Q. The full name?

(Deposition of Lee Roy Waldrep.)

A. Judith Anne Waldrep.

Q. Where was the child born?

A. Southwestern General Hospital, El Paso, Texas.

Q. What was the date of its birth, if you know?

A. January 22, 1952.

Q. And your son had lost his life when?

A. January 19, prior to that.

Q. Is John Milton Waldrep's wife, Fay Kelly Waldrep, still living? A. No. [20]

Q. When did she die?

A. She died—I don't remember definitely—but she died on the Sunday before Easter Sunday in 1953.

Q. Was that approximately one year after the death of her husband?

A. A little over a year.

Q. Was your son's body returned to the States for burial? A. It was.

Q. Where was he buried? A. Here.

Q. In Jasper, Walker County, Alabama?

A. Yes.

Q. In what cemetery?

A. Oak Hill Cemetery.

Q. When was that?

A. It was either the 30 or 31st of January.

Q. Of what year? A. 1952.

Q. How long had it been prior to that time since you had last seen John Milton Waldrep?

A. It had been approximately four or five

(Deposition of Lee Roy Waldrep.)

months, he came home to visit us before he went to Korea.

Q. Was that after his marriage to Fay Kelly?

A. Yes, sir.

Q. Was she with him at the time? [21]

A. No, sir.

Q. She didn't come to Jasper with him?

A. No.

Q. Was she at that time in good health, or do you know about that?

A. Just hearsay is all, I understood her health was not too good at that time.

Q. You had an opportunity to observe your son's physical condition at the time he returned home before leaving for Korea, did he appear to be in good physical condition at that time?

A. Excellent.

Q. How long did he stay at home with you at that time?

A. He didn't stay but a little while, I would say he was here two or three days.

Q. Did he sleep in your home and eat his meals with you? A. Yes, sir.

Q. Do you know what rank he held in the military service at the time of his death?

A. He was a sergeant.

Q. Do you know what the pay of a sergeant was? A. No, I don't.

Q. You don't know what he was making at that time? A. No, I don't.

(Deposition of Lee Roy Waldrep.)

Q. You have how many other children living now? [22] A. Nine.

Q. How old is the youngest one?

A. Twenty-four.

Q. How old is the oldest one?

A. Thirty-nine or forty—I would have to figure—forty. Will be forty-one this coming November.

Mr. Allen: You are asking about other children of his?

Mr. Elliott: That's right.

Q. Is Mrs. Waldrep still living?

A. Yes, sir.

Q. How old is she? A. Sixty-four.

Q. Is she in good health?

A. I would say fair, yes.

* * * * *

Q. Was he honorably discharged from the U. S. Marine Corps? A. Yes, he was.

Q. Do you know what rank he held at the time of his discharge?

A. No, I don't, I saw his record in the Probate Office but I don't remember.

Q. Do you know how much he was making in the U. S. Marine Corps?

A. I would say ninety or one hundred dollars a month.

Q. Do you know whether or not he received certain other [23] allowances in the way of lodging and his meals in addition to the cash he received?

A. Yes, he did.

Q. Do you know whether or not he received

(Deposition of Lee Roy Waldrep.)

clothing in addition to that? A. He did, yes.

Q. Did you ever see his wife in Texas?

A. I never saw her.

Q. You never saw her during her life time?

A. Oh, yes. I never saw her before they married,
I saw her after his death.

Q. Did she attend his funeral?

A. No, sir.

Q. Did she visit you in Walker County?

A. No, sir.

Q. Did you visit her in Texas? A. Yes.

Q. Who went with you on that visit?

A. My wife and two daughters.

Q. Was that after the birth of your grand
daughter? A. Yes, sir.

Q. Did you see Judith Anne Waldrep?

A. Yes, sir.

Q. Is she now living? A. Yes, sir. [24]

Q. Where does she live?

A. Alamagordo, New Mexico.

Q. Do you know the street address?

A. No.

Q. Do you know the mailing address?

A. I believe it is Post Office Box 501, is my rec-
ollection.

Q. She does get her mail at a Post Office box?

A. Yes, sir.

Q. How old is she now?

A. You mean the girl, Judith Anne?

Q. Yes.

A. She is six—no, she is just five years old.

(Deposition of Lee Roy Waldrep.)

Q. Who is she living with there?

A. With her grandmother and grandfather, and an aunt.

Q. What is the grandparents' name?

A. Mr. and Mrs. J. T. Kelly.

Q. Do they live in Alamagordo, New Mexico?

A. Yes.

Q. What is the aunt's name that you referred to? A. Mrs. Fern Bloth.

Q. And she also lives in Alamagordo?

A. Yes.

Q. On your visit to Texas that you testified about, how old was the baby at that time?

A. At the time I visited, she was two weeks old. My wife [25] and some of the daughters visited her a short time after her birth and after John's death.

Q. Did you visit with them in their home?

A. Yes, sir.

Q. And you saw Sergeant John M. Waldrep's wife at that time? A. Yes, sir.

Q. How long did you stay there on that visit?

A. About three days, I believe.

Q. Was Sgt. Waldrep in the hospital any while he was in Korea that you know of?

A. No, sir.

Q. Did you receive any word from any source that his physical condition was deteriorating during that period? A. No, sir.

Mr. Elliott: That is all at this time, I might

(Deposition of Lee Roy Waldrep.)

want to ask him some other questions later, if I may.

Mr. Allen: I think you have that right.

Examination

Q. (By Mr. Allen): Mr. Waldrep, how many years does your elementary school have here in Jasper? A. Seven, I believe.

Q. When your son joined the Merchant Marine, you say he was in the 10th grade?

A. I believe so. [26]

Q. Is that Junior High School, or High School?

A. At that time it was High School, in other words, after the seventh grade we went to what we called High School. At the present time we do have Junior High School.

Q. How many years did you have in high school at the time he entered? A. Four.

Q. In other words, seven years elementary school and four years high school?

A. I believe so.

Q. You testified that he went to high school two years, is that right? A. Yes, sir.

Q. And then joined the Merchant Marines?

A. Right.

Q. When he came back from the Merchant Marines, how long did he stay with you before he joined the Marines?

A. Oh, I would say approximately six months.

Q. He was approximately eighteen years old then.

(Deposition of Lee Roy Waldrep.)

And he came back and lived in the same house with you as a member of the family?

A. Yes, sir.

Q. And he did certain jobs around the house?

A. Yes, and on the farm.

Q. You testified you paid him fifteen or twenty dollars a week, is that just an estimate? [27]

A. That's just my best judgment.

Q. Did you pay by check, or how?

A. Sometimes I would, probably, sometimes I wouldn't.

Q. You didn't have any agreement to pay him anything, did you?

A. Yes, I believe I did, because I was farming pretty extensively at that time, and was hiring labor.

Q. How big a farm did you have, Mr. Waldrep?

A. I was farming with mules, I had, I believe that year I had a four horse operation.

Q. How many acres was that?

A. I would say approximately seventy-five or a hundred.

Q. How many in cultivation?

A. That is what I am talking about, in cultivation.

Q. He stayed there I believe you said about six months after he got out of the Merchant Marines?

A. Yes, six to eight months.

Q. In paying him, did you withhold any income tax or social security or anything like that?

(Deposition of Lee Roy Waldrep.)

Mr. Elliott: I object to that, I don't believe farm labor is subject to any withholding.

Q. I am just asking him. A. No, sir.

Q. Did he file an income tax report during that six months period or do you know?

A. I don't know. [28]

Q. Now when he enlisted in the Marines, where did he go? A. The U. S. Marines?

Q. Yes.

A. Camp Le Juene, North Carolina, is my recollection.

Q. How long did he stay there.

A. About two years, or two years and five months and a little better.

Q. Was he stationed at any other place during that period of time? A. Not that I know of.

Q. After he got out of the U. S. Marines, he came back to Jasper? A. Yes, sir.

Q. How long did he stay here then?

A. I would say about six or eight months.

Q. How long is a semester year in high school?

A. I believe it is nine months.

Q. Then when he came back from the Marines, he didn't get in a full semester of school, did he?

A. I couldn't say.

Q. How many months did he work for Vines Brothers as a mechanic?

A. He worked most of that period—a short time after he came back he got a job and worked there until he re-enlisted, I would say six to eight months.

Q. How old was he when he enlisted in the

(Deposition of Lee Roy Waldrep.)

Army? [29] A. Let's see—about twenty-two.

Q. That was in 1949? A. Yes, sir.

Q. Where did he go immediately after he enlisted?

A. My recollection it was Ft. Jackson, South Carolina.

Q. Do you know how long he stayed there?

A. No, sir, I don't.

Q. Do you have any judgment about it?

A. No, it would be a guess.

Q. Where did he go from there?

A. I believe he went from there to El Paso.

Q. Do you know approximately when he got to El Paso?

A. I believe it was in the Spring of 1951, my best judgment.

Q. Well, he must have stayed out there a little over a year. A. Something like that.

Q. How long did he stay in El Paso?

A. He stayed in El Paso all the time he was in the west, he was ordered from there overseas.

Q. What type job did he have in the Army?

A. Construction Engineers Corps.

Q. When did he become a Sergeant?

A. I couldn't say, but he was a Sergeant the last time he was home is all I know.

Q. That was when he was stationed in El Paso?

A. Yes, sir. [30]

Q. Was he a Buck Sergeant, or do you know the difference?

A. Yes, he was a Buck Sergeant, and then either

(Deposition of Lee Roy Waldrep.)

he was promoted to Staff Sergeant or he had a promotion coming up, I am not sure which.

Q. He was a Buck Sergeant so far as you know?

A. Yes, so far as I know.

Q. Mr. Waldrep, your son was never employed by anyone other than Vines Motor Company, and in the service as you have testified in the Merchant Marines, the U. S. Marines and the Army, is that right?

A. That's right.

Q. Do you know the salary he received from Vines Brothers?

A. Approximately, I saw his pay envelopes, I think I saw some of them at the house in looking through some things not long ago, it would run from twenty-five to thirty to thirty-three dollars, maybe sometimes as high as thirty-five.

Q. That is a week?

A. Yes, sir.

Q. During that time he was going to G. I. School and receiving money from the Government?

A. That's right.

Q. Do you know whether he ever filed any income tax returns?

A. I don't know.

Q. You don't have a copy of any of them, do you?

A. No, sir. [31]

Q. Do you know whether or not he had ever applied to the Government for any unemployment compensation?

A. No, I don't.

Q. Had he ever been in the hospital here in Jasper?

A. No, sir.

Q. Had he ever been in the hospital anywhere that you know of?

A. No.

(Deposition of Lee Roy Waldrep.)

Q. He had never had any operations to your knowledge? A. No, sir.

Q. Had he had any mental illnesses?

A. No, sir.

Q. Had he had diabetes? A. No, sir.

Q. Tuberculosis? A. No, sir.

Q. Malaria? A. No, sir.

Q. Did he have a Doctor here in Jasper?

A. The only time—I am just assuming he saw the family doctor, Dr. Jackson, when he had the measles. Two or three of the other children had it along with him, and I am assuming the Doctor saw them all at that time.

Q. When he was in the Marines you say he was in the Fire Fighting Squadron?

A. Yes, sir. [32]

Q. And when he was in the Army he was in the Engineers Corps?

A. Yes, Construction Engineers Corps.

Q. What type job did he do?

A. Constructed roads and bridges out in front, prepared the way for advance of the army.

Q. That is what he was training to do?

A. He was doing that.

Q. I am talking about the time in El Paso. He was not an Engineer, was he?

A. No, sir.

Q. So far as you know, he helped build the roads? A. Yes.

Q. What amount of G. I. insurance did he carry?

(Deposition of Lee Roy Waldrep.)

A. I understand he had \$10,000.00.

Q. Who did it go to?

A. To his wife and baby. Now I understand it is in a trust fund for the baby.

Q. Did he have any other life insurance?

A. Not that I know of.

Q. At the time of his alleged death, was there any back pay due him? A. I don't know.

Q. Do you know what his social security number was? A. No, I don't.

Q. Did he have a social security number? [32A]
* * * * *

Q. Had there been any other claims made against the United States Government, made on behalf of your son, has anybody made any claims against the U. S. Government on account of his death? A. Yes, I made a claim.

Q. What type claim is that?

A. I don't know what you call it—a dependency claim.

Q. Who did you file that claim with?

A. I don't know—the proper authorities.

Q. You filed a claim with the U. S. Government which you called a dependency claim?

A. Yes, sir.

Q. What is a dependency claim?

(Witness does not answer.)

Q. Is it alleging that you were a dependent of your son? A. To some extent, yes. [33]

Q. And claiming a pension?

(Deposition of Lee Roy Waldrep.)

A. Well, I don't know whether it was a pension or not.

Q. Did you file that claim here in Jasper?

A. No, I filed it with the proper authorities of the War Department.

Q. What action was taken on that?

A. It was approved for a small amount.

Q. Are you now receiving it?

A. Not now, I'm not.

Q. How long did you receive it?

A. Approximately two years.

Q. How much was it a month?

A. Forty dollars I believe, my wife and I.

Q. Eighty dollars a month for both of you?

A. Yes.

Q. And that went on for two years?

A. Yes, approximately.

Q. What was the reason for it being terminated?

A. Because of income sufficient I wasn't depending on it.

Q. You started making more income than the statute allowed you to make?

A. Yes. [34]

* * * * *

Q. And you were drawing on a dependency claim is that right?

A. Yes, sir.

Q. How long did his wife live after his death?

A. From January 19, 1952, until the last of March 1953, a little over a year. About a year and two months.

Q. Do you know whether or not she re-married

(Deposition of Lee Roy Waldrep.)

during that period of time? A. She did not.

Q. Where did she live during that period?

A. El Paso and Alamogordo, New Mexico.

Q. Who did you say the child is living with now, the grandparents?

A. The grandparents and an aunt. They live together.

Q. Has there been any other claim made against the Government for you or anyone that you know of other than the pension you have testified about?

A. No.

Q. Is the child receiving social security?

A. My understanding is that she is, I don't know of my own knowledge.

Q. That is being paid to the grandparents, I suppose? [35]

A. It is being paid to the First National Bank as guardian, I believe that is the way it is handled.

Q. Do you know how much it amounts to?

A. No.

Q. During the time your son was in the service, did he make any allotments to anyone?

A. Probably to his wife, I don't know.

Q. You don't know whether he did or not, is that your answer? A. No, I don't know.

Q. You don't know whether he ever requested a deduction from his pay while he was in the service or not, do you? A. No, I don't know.

Q. What is Mrs. Roth's full name?

A. I believe you will find it is Bloth. B-l-o-t-h.

* * * * *

(Deposition of Lee Roy Waldrep.)

Q. You testified a minute ago that so far as you knew your son had never been on sick call while in the Army or Marines, you don't know that to be a fact, you weren't there were you?

A. No, I wasn't there.

Q. He could have been, is that right?

A. I wouldn't think so without knowing it.

Q. Do you know whether or not your son's wife had ever been married prior to her marriage to him? [37]

A. Not to my knowledge.

Redirect Examination

* * * * *

Q. (By Mr. Elliott): Relative to the semester in high school that Mr. Allen asked [38] you about, after your son came out of the Marines I believe you testified he went to school about eight months, is that right? A. Approximately.

Q. That was under the G. I. program?

A. Yes, sir.

Q. He went to school at night, or afternoon and night? A. Yes, sir.

Q. Isn't it a fact that during that period of time he could advance more than one grade—in other words he wasn't on a semester basis, was he?

A. That is my understanding, yes.

Q. Mr. Waldrep, you are now in the Insurance business, aren't you? A. Yes.

Q. You have taken up that profession or occupation since the date of your son's death?

(Deposition of Lee Roy Waldrep.)

A. Yes, after I went broke farming.

Q. There was a small policy on John's life made to his mother you say?

A. Yes, \$500.00 his mother had been carrying on him, but she discontinued paying the premiums, and it was something like three fifty or four hundred dollars after deduction of the premiums.

Q. You don't know exactly what she did get?

A. No, I have seen a record of it but I don't know.

Q. Would you say it was less than \$150.00?

A. My recollection is that it was between three and four hundred dollars.

/s/ LEE ROY WALDREP. [40]

[Endorsed]: Filed March 6, 1957.

[Title of District Court and Cause.]

DEPOSITION OF DONALD E. BAKER

Be It Remembered, that the deposition of Donald E. Baker, was taken at the instance of Plaintiffs on December 8, 1956, beginning at 10:00 a.m., at 3314 White Building, Seattle, King County, Washington, pursuant to stipulation between Counsel, before Orin E. Gray, a Notary Public;

John W. Riley, Esq., appearing on behalf of [1] Plaintiffs; Carl G. Koch, Esq., appearing on behalf of Defendant;

Whereupon, the following proceedings were had and done, to wit:

Mr. Riley: For the record, this is the deposition

(Deposition of Donald E. Baker.)

of Mr. Donald E. Baker taken pursuant to Rule 30 of the Rules of Civil Procedure. Carl, you correct me if this is not correct, the objections to the questions except as to the form are reserved until the time of trial, and it is stipulated that this deposition will be adjourned until Wednesday evening; that is, December 12th, at Mr. Koch's office, 1411 Fourth Avenue Building, Seattle, at 5:00 p.m.

Mr. Koch: For the purpose of conducting the cross examination at that time.

DONALD E. BAKER

being first duly sworn on oath was called as a witness on behalf of Plaintiffs and testified as follows:

Direct Examination

Q. (By Mr. Riley): Mr. Baker, state your full name for the record.

A. Donald Eugene Baker.

Q. Where do you reside, Mr. Baker, at this time?

A. I don't have a permanent address because I am traveling so often but can I give my address in Dearborn?

Q. Yes. A. It is Post Office Box——

Q. First of all, your address here in Seattle at this time?

A. 17545 Aurora Avenue, Garden Park Motel.

Q. And that is not your permanent residence?

A. No.

Q. Where is your permanent residence?

A. Dearborn, Michigan.

(Deposition of Donald E. Baker.)

Q. You have a post office box address there?

A. Yes.

Q. That is what?

A. Auditing Department, Ford Division, Ford Motor Company, Post Office Box 607, Dearborn, Michigan.

Q. What is your present occupation, Mr. Baker?

A. I am an auditor.

Q. For what company?

A. Ford Motor Company. [3]

Q. How long have you been employed by Ford Motor Company? A. Two and a half years.

Q. What was your occupation previous to that?

A. I was an auditor in public accounting, Salinas, California.

Q. For what period?

A. From March, 1953, until April of '54.

Q. Prior to 1953 what was your occupation?

A. I was in the United States Air Force at that time.

Q. Incidentally, how old are you, Mr. Baker?

A. 31.

Q. Were you in the Air Force on January 18, 1952? A. Yes, I was.

Q. Can you state where you were on that day?

A. January 18, I was on board a Northwest Airlines aircraft bound for the United States on emergency leave from Japan.

Q. What was your duty station at the time?

A. My duty station was Kunsong, Korea.

(Deposition of Donald E. Baker.)

Q. Were you on active flying status at that time?

A. Yes, I was in a combat flying outfit.

Q. Where did this flight, this Northwest Airlines flight on which you were a passenger on January 18, 1952, originate?

A. United States Air Base outside of Tokyo. [4]

Q. And what was the destination of that flight?

A. Seattle.

Q. How long were you in the Air Force or had you been in the Air Force at that time?

A. This was my second tour of duty. I had been on active duty approximately nine months at the time, and previous to that I had spent three and a half years in the Air Force during World War II.

Q. What was your capacity during World War II?

A. During World War II I was a navigator.

Q. And what type of aircraft were you flying?

A. Primarily B-24 heavy bombers.

Q. How much experience, flight experience, have you had in B-24 type aircraft?

A. Approximately a thousand hours.

Q. Would you describe the B-24, what type of aircraft is it?

A. The B-24 is a four engine bomber, classified as a heavy bomber at that time, and carried a complement of ten men. [5]

* * * * *

Q. What type of flying were you engaged in in Korea?

(Deposition of Donald E. Baker.)

A. The flying in Korea was strictly night attack bombing and strafing of convoys and locomotives.

Q. During the course of your flight experience have you ever been in aircraft which stalled?

A. Yes, I have.

Q. What is a stall, just briefly?

A. A stall is a situation in which an airplane is brought to such an altitude it loses its flying speed and normally will drop off losing altitude, either to the right or left depending.

Q. In your flight experience have you observed the characteristics of stalls in aircraft which you feel enable you to identify a stall?

A. Yes, in the heavy bomber types I have ridden in the back of the airplanes in which the pilots were practicing stalls. [7]

Q. Have you flown an aircraft in your experience as a navigator and air crewman in instrument conditions? A. Yes, I have.

Q. Have you flown an aircraft in your capacity as an air crewman in icing conditions?

A. Yes, I have.

Q. Would you state again your total flight time at the time you were on the Northwest Airlines flight on January 18 bound for the State of Washington?

A. As near as I can recall it was probably around 1400 hours.

Q. Would you state again the air base in which you boarded this Northwest Airlines plane?

(Deposition of Donald E. Baker.)

A. I believe it was called Tachikawa Air Base, a United States Air Force Base outside of Tokyo, about 18 miles from Tokyo.

Q. Do you recall the date that you boarded this aircraft?

A. That is rather hazy. I believe it was the 17th of January, but we crossed the International Date Line and I can't recall exactly what the date was.

Q. When you boarded the aircraft did you have any ticket or any document given to you from or identified as a document issued by Northwest Airlines?

A. I don't recall receiving any receipt or ticket as such.

Q. Were the personnel aboard the airplane as the crew for [8] this particular aircraft you boarded, Service personnel or could you identify them as Northwest Airlines personnel?

A. They were civilian personnel wearing Northwest Airlines insignia.

Q. Could you identify the aircraft itself as a Northwest Airlines aircraft or was it identified with a characteristic insignia of any kind?

A. No, the airplane itself bore Trans-World Airlines marking.

Q. What was the first stop in this aircraft on this flight?

A. I believe it was Shemya Air Base in Northern Pacific.

(Deposition of Donald E. Baker.)

Q. What was the purpose of the stop, do you know?

A. The purpose was routine fueling service.

Q. During the course of the flight at this point did you become acquainted with any of the crew men? A. No.

Q. Did the same crew who boarded the aircraft in Tokyo, Japan, fly it from Shemya? [9]

* * * * *

Q. During this portion of the flight after the aircraft left Anchorage did you have occasion to speak to any of [11] the crew or become acquainted with any of the crew? A. Yes.

Q. And which members of the crew did you speak to?

Mr. Koch: I object to that question as being leading.

A. Ultimately I became acquainted with all of the crew members.

Mr. Koch: I object to that as not responsive. He asked you what members of the crew you spoke to.

A. All of the crew members.

Q. Do you recall the names of any of the crew members on this portion of the flight?

A. The two pilot names I believe were Pfaffinger and Kuhn. I forget the hostess' name.

Q. What discussions did you have, if any, with the pilot and the co-pilot, or the co-pilot?

A. Discussions centered mostly in air talk, where I had flown, where they had flown, also the co-pilot

(Deposition of Donald E. Baker.)

asked me to check him out on some loran navigation problems. Since I had been instructing in Korea I did so.

Q. Who initiated the discussions between yourself and the pilot or the co-pilot?

Mr. Koch: If you know.

A. The copilot.

Q. Where did these discussions take place? [12]

A. I walked into the cabin and the copilot noticed I was a crew member and stopped and talked to me and asked me if I knew anything about loran and asked me to come up to the cabin or to the cockpit and take a look at the equipment they had on board.

Q. The copilot asked you to come forward to the pilot compartment, is that correct?

A. Yes.

Q. How much time did you spend in the pilot's compartment? A. Two-two and a half hours.

Q. Do you recall the hour at which your flight left Anchorage, Alaska, as nearly, you may state it as nearly as you can recall?

A. Late in the evening, 9:00 or 10:00 o'clock, I am not sure.

Q. Were you in a position where you could observe the weather conditions?

A. Only the conditions to the front of the aircraft.

Q. At what altitude were you flying at the time you visited the pilot's compartment after departing from Anchorage?

(Deposition of Donald E. Baker.)

A. I don't recall exactly, I think it was around 8 or 9,000 feet.

Q. What was the visibility at that altitude?

A. The visibility was clear, we were above the clouds.

Q. Had you experienced any icing conditions or any unusual [13] flight conditions after departing Anchorage? A. No, I don't believe so.

Q. What, if anything, unusual happened during this portion of the flight after leaving Anchorage enroute to Seattle?

Mr. Koch: I object to the question because it is leading.

Q. Did anything unusual happen on the leg of the flight from Anchorage enroute to Seattle?

A. Yes.

Q. Would you state what that was?

A. The oil quantity gauges indicated we were losing oil rapidly on one of the engines.

Q. Did you see the gauges? A. Yes, I did.

Q. Did you discuss this with the pilot or copilot?

A. The pilot pointed it out to the two of us.

Q. You say "to the two of us" to who are you referring? A. To the copilot and myself.

Q. Did you observe what engine he was referring to?

A. I don't recall identifying the engine from the oil gauge at the time.

Q. Could you, from your position in the cockpit tell which engine was malfunctioning?

(Deposition of Donald E. Baker.)

A. No, I could not.

Q. Did you later determine which engine was malfunctioning? [14]

A. The pilot determined the No. 1 engine was malfunctioning.

Q. Did he state to you the No. 1 engine was malfunctioning? A. Yes.

Q. Do you know which engine on aircraft No. 1 engine is? A. Yes.

Q. Which engine is it, can you relate it by position to the aircraft?

A. It is the outboard engine on the left facing forward.

Mr. Koch: Are we talking about malfunctioning or about a gauge showing a drop in oil pressure?

Q. I will ask that question. What happened to the engine we have described it as malfunctioning, what happened to No. 1 engine?

A. The oil quantity gauge indicated we were losing oil rapidly. [15]

* * * * *

Q. What, if anything, was done to engine No. 1 at this time or at that time?

A. Nothing was done because I left the cockpit at that time.

Q. Where did you go?

A. I took a flashlight and went to the cabin of the aircraft and observed the trailing edge of the wing behind No. 1 engine.

Q. Why did you do this?

(Deposition of Donald E. Baker.)

A. The pilot wanted to know if I could see any oil loss.

Q. Were you able to observe an oil loss?

A. Yes.

Q. Would you describe what you observed?

A. Oil was collecting along the trailing edge of the wing and flicking off in drops.

Q. And how were you able to observe this?

A. It was a visual observation using a flashlight from about the center of the aircraft.

Q. Approximately what time of night was this again? [16]

A. Somewhere around midnight.

Q. Did you remain in the after portions of the aircraft or did you return forward?

A. I returned to the cockpit.

Q. What took place upon your return to the cockpit, if anything?

A. During my absence the pilot had feathered the engine and was proceeding with emergency radio work notifying the ground that he had lost an engine.

Q. Did you observe that engine had been secured yourself?

A. Yes, I did.

Q. Where and when did you observe that an engine had been secured?

A. After returning to the cockpit the pilot was using an emergency light spotting his No. 1 engine to make sure it was properly feathered.

Q. Could you see it from where you were?

A. Yes.

Q. And was the propeller feathered?

(Deposition of Donald E. Baker.)

A. Yes.

Q. Did you remain in the pilot's compartment after the No. 1 engine had been secured?

A. Yes.

Q. Incidentally, we have related this to No. 1 engine, which engine did you see; in other words, which propeller did [17] you see feathered, would you relate that to the position on the aircraft?

A. The propeller that was feathered was the outboard engine on the left facing forward.

Q. Were you able, at this point, or did you observe the weather conditions after the No. 1 engine had been secured?

A. Yes, the visibility was clear. However, we were clipping off the tops of clouds about that time.

Q. Did you observe any icing conditions from your position?

A. Yes, there was some ice collecting on the pilot's windshield.

Q. Would you describe this as moderate or light or can you describe this icing as moderate or light or were you able to form an impression at all? A. It is my opinion it was light.

Mr. Koch: I object to the question as calling for the witness' opinion.

Q. Would you describe the aircraft's flight performance on three engines?

A. The pilot was maintaining altitude at about 175 miles an hour.

Q. Were you doing anything else or assisting

(Deposition of Donald E. Baker.)

him in any other way at this time or at that time?

A. Not in so far as the operation of the aircraft was concerned. [18] I did operate the loran set and informed him he was on course.

Q. What is loran?

A. Loran is a long range radio navigation device.

Q. Was the loran in this aircraft functioning properly? A. Yes.

Q. Were you the only one on the aircraft who could operate the loran?

Mr. Koch: If you know.

A. I don't know whether I was the only one.

Q. Do you know whether or not the pilot and the copilot were trained to operate the loran?

A. The copilot appeared to have a working knowledge of loran.

Q. Where did the aircraft land?

Mr. Koch: If you know.

Q. If you know.

A. We were instructed to land at Sandspit, British Columbia.

Q. Did you listen to the radio conversations after this engine was secured? A. No.

Q. How were you informed that you were instructed to land at Sandspit?

* * * * *

Q. Do you know why the aircraft landed at Sandspit? Answer [19] that yes or no.

A. No.

Q. Were you able to, how long did you remain

(Deposition of Donald E. Baker.)

in the cockpit before landing at Sandspit?

A. Until about 15 minutes before the landing approach.

Q. Did you remain in the cabin or were you in the cabin when you came in sight of Sandspit?

A. Yes, I was in the cabin at that time.

Q. Could you see the airstrip from your position?

A. Only on the turn on to the final approach.

Q. Would you describe, were you able to observe the visibility? A. Visibility was poor.

Mr. Koch: I object because that isn't a responsive answer to the question.

Q. That question should be answered yes or no, I asked you were you able to observe the visibility?

A. Yes.

Q. What was the visibility at that time?

A. Poor.

Q. Can you estimate the visibility in miles?

A. No.

Q. Can you estimate how far away you were from the airstrip in your turn to the final approach? A. No. [20]

* * * * *

Q. Just to clarify, when did you leave the pilot's compartment again Mr. Baker?

A. When we started descent to approach Sandspit.

Q. Where did you go then?

A. To my assigned seat in the cabin.

Q. And it was from this position, is it true then,

(Deposition of Donald E. Baker.)

it is from this position you observed the final approach to the airport?

A. I observed the turn on to the final approach to the airport.

Q. Was the landing effected at that point?

Mr. Koch: That is leading.

Q. What happened next?

A. We proceeded to shoot the landing, it appeared to me we were landing high and fast, and that the airplane floated and we passed over the lights at the end of the runway and didn't touch down for a period of time after that. We rolled on the runway for perhaps five to ten seconds then the pilot applied power and attempted to take off again and in fact did get the airplane back in the air. [21] * * * * *

Q. Did you know where the aircraft was at the time it touched down and at the time the pilot took the wave off? A. No.

Q. Did you know the airstrip to which the aircraft was [22] approaching or had made its approach, did you know it by name?

A. No. Let me take that back, I have seen the radio guide book for the airport in which we were landing and had seen a map.

* * * * *

Q. When you left the pilot's compartment to return to your seat in the cabin as you have described it, did you know where the aircraft was destined or bound to, do you know where the aircraft was heading at that time?

(Deposition of Donald E. Baker.)

A. The pilot informed me we were going to land at Sandspit.

Q. Did the airplane then crash in the water or land in the [23] water? A. Yes, it did.

Q. Would you describe what happened after the airplane landed in the water?

A. There was total darkness, all lights failed. Having seen a map of the airport I knew we had to be in the water so I stood up on my seat and grabbed a life vest and handed out life vests to people around me. I couldn't see them, I could feel the people and shoved the life vests in their hands and told them what it was and then I made exit from the airplane on an escape hatch on the left side of the airplane.

Q. Where was the escape hatch which you made your exit from located?

A. It was located on the left-hand side of the aircraft facing forward over approximately the center of the wing.

Q. How long did the aircraft remain afloat—strike that question—did the airplane float or did it fill with water immediately?

A. The airplane started to settle in the water immediately.

A. Were you able to observe how many of the passengers made their way from the aircraft?

A. As nearly—

Mr. Koch: Either you were or weren't able to.

Q. Yes, or no. [24]

A. Will you restate the question?

(Deposition of Donald E. Baker.)

Q. Were you able to ascertain approximately how many of the passengers were able to escape from the airplane?

Mr. Koch: I don't believe that is the same question.

(Reporter reads last question back.)

A. Yes.

Q. Can you state how many left the aircraft with you at this time or at that time?

A. Around 35.

Q. On leaving the aircraft where did you personally go?

A. I first went to the left wing and as the aircraft settled in the water I dove in the water and swarm to the nose and climbed up on the top of the fuselage so I ended up on the top of the fuselage to the forward part of the airplane.

Q. Were there any other portions of the aircraft still above the water?

A. The right wing tip was still above water at that particular time, the entire top side of the aircraft was above the water. Eventually it sunk to a point where the fuselage was under water and the right wing tip and rudder were the only things out of the water.

Q. Did you have a Mae West? [25]

A. Yes, I did.

Q. Did you see any other people wearing life vests? A. No, I did not.

Q. What type of life vest did you have?

A. It was a regular life vest that we would call

(Deposition of Donald E. Baker.)

a Mae West; however, it was of a type that I had never used or seen before and it was rather difficult to put on.

* * * * *

Q. Have you had occasion in your military flying experience, to wear a Mae West? A. Yes.

Q. Have you worn different types of Mae Wests before? A. Yes.

Q. Was this like anything that you had ever worn before? A. No.

Q. Did you have any particular difficulty with this particular vest that you took from the aircraft with you? A. Yes.

Q. Would you state what difficulty you had?

A. It was difficult to put it on because the material was of lighter quality than the Mae West that I was accustomed to, otherwise it was much more flexible than the type I [26] was accustomed to.

Q. Did you actually put the vest on?

A. Yes, I did.

Q. How was it inflated or did you inflate it?

A. I inflated it.

Q. How did you inflate it?

A. By pulling a ripcord.

Q. Did it have an automatic inflation device?

A. Yes.

Q. This did function? A. Yes.

Q. Were you given any instructions in the course of your flight by anyone on the aircraft leading to the use and type of life vest that were

(Deposition of Donald E. Baker.)

installed in the aircraft? A. No.

Q. Were you given any literature by anyone in the aircraft or any of the crew members describing or relating to the use of the life vests which were installed in the aircraft? A. Yes.

Q. Did you read that literature?

A. Yes.

Q. Was the vest which you wore the type which was described on the literature that was given to you? A. I can't answer that question. [27]

Q. Do you recall the type of Mae West or life vest which was described in the literature which you have just referred to?

A. It described a Mae West, just a general type Mae West, no particular type. When we speak of Mae West we are talking about a general category of life vests.

Q. Do you recall whether the instructions or can you state whether or not the instructions in this literature that you had was applicable to the vest which you subsequently used?

A. I don't know.

Q. May I ask where did you obtain the literature to which you have just referred?

A. Literature was in each seat package.

Q. This was not given to you personally when you boarded the aircraft or was it given to you personally when you boarded the aircraft?

A. No, it was in a flight folder at the seat.

Q. Were you instructed by anyone aboard the aircraft to refer to this literature? [28]

* * * * *

(Deposition of Donald E. Baker.)

Q. Can you answer that yes or no?

A. Yes.

Q. Is your answer yes? A. Yes.

Q. Who was that? A. The hostess.

Q. Returning to your situation after you evacuated the aircraft, do you know whether or not there were any life rafts aboard the aircraft?

A. Yes.

Q. Were there or were there not?

A. Yes, there were.

Q. What leads you to conclude that there were life rafts aboard the aircraft.

* * * * *

A. I saw one life raft in the forward compartment.

Q. Was this raft ever removed from the aircraft? A. No.

Q. Do you know whether an attempt was made to remove it from the aircraft? A. Yes. [29]

Q. And when was that attempt made?

A. An attempt was made after the crash.

Q. And who made the attempt or do you know who made the attempt first? A. The copilot.

Q. The answer should be yes or no, do you know who made the attempt? A. Yes.

Q. Who was that? A. The copilot.

Q. Did you assist him or were you near him at the time he attempted to remove it from the aircraft?

A. No, I didn't assist him, yes, I was near him.

Q. What did he do?

(Deposition of Donald E. Baker.)

A. The copilot went back inside the airplane after the fuselage was under water and attempted to dislodge the life raft.

Q. What were the results of his efforts?

A. He couldn't get the life raft out.

Q. Did you talk to the pilot after the plane, after you evacuated the aircraft? A. Yes.

Q. And would you relate your conversations with the pilot, the best you can recall?

A. I told the pilot that I felt that there was a possibility [30] that some of us wouldn't survive and I asked him directly if he could tell me what happened to cause the accident?

Q. What did he say?

A. He appeared to be very incoherent and the most I could get out of him was that, something about going to hit a ditch. That is about all I could get out of him.

Q. Were you able to talk to the copilot at any length after you talked to the pilot? A. Yes.

Q. What were your conversations with the copilot or what did you talk about?

A. Our talk was directed towards plans of trying to get that life raft out, if possible.

Q. Were your discussions confined to this topic?

A. Yes.

Q. Did you remain on the fuselage the rest of the time until you were rescued or did you leave the fuselage? A. I left the fuselage.

Q. Did you have to leave the fuselage?

A. Yes.

(Deposition of Donald E. Baker.)

Q. Why was that?

A. The top of the fuselage was under water and not tenable at the time.

Q. Where did you go?

A. I swam to the right wing tip. [31]

Q. Why did you swim to the right wing tip?

A. The right wing tip was still out of water.

Q. Were there any other people there?

A. Yes, there were.

Q. Can you estimate or are you able to estimate the time which elapsed after you left the aircraft until the time you reached the right wing tip?

A. No, I can't.

Q. How many people were out on the right wing tip when you went out there?

A. I don't know how many there were.

Q. Are you able to state approximately, could you give me any idea of the number of people who were there?

A. After I reached there there were approximately 15.

Q. Were there any other survivors or any other passengers of the aircraft that were on other portions of the aircraft at that time?

A. Some were still at the back part of the fuselage holding on to the vertical stabilizer.

Q. Could you see these people? A. Yes.

Q. What was the visibility about this time? Strike that,—Do you recall the visibility of the weather at the time that you reached the right

(Deposition of Donald E. Baker.)

wing tip of the aircraft, you can answer that yes or no. [32] A. Yes.

Q. Would you state what the visibility was?

A. At first we had intermittent snow with very poor visibility and it stopped snowing and the moon came out and we could see.

Q. Could you see where you were, could you see land or could you see any other identifiable objects? A. Yes.

Q. What could you see?

A. We could observe obstruction lights and land.

Q. Could you or could you not see the airport from that position?

A. We could see lights but I can't identify it as the airport.

Q. Now would you just in a narrative state what happened to you from that point until you were rescued?

A. Well, our main interest was hanging on to the wing. We would occasionally get washed away by the waves, but the visibility was getting better and we could find our way back to the wing tip, those people who were able to, physically able to manage it. [33]

* * * * *

Q. How were you able to leave the airplane?

A. We were dragged to shore by a row boat with an outboard motor on it.

Q. You referred to "we."

A. The other survivors and myself, seven in all.

Q. Do you know where this boat came from?

(Deposition of Donald E. Baker.)

A. No.

Q. How many men were in the boat?

A. Two. [34]

* * * * *

Q. Where were you taken in this boat that picked you up?

A. We were dragged to the shore.

Q. Is it your statement you were unable to get into the boat?

A. That is right, there wasn't room for seven of us in the boat.

Q. Were any of the seven of you placed in the boat?

A. No one was completely put in the boat. I was dragged across the side of the boat because I had slipped and started to go under water.

Q. Do you know where the boat landed?

A. No, I don't.

Q. The boat did land I take it?

A. I don't know the exact location, yes, I did land on the shore line.

Q. What happened to you when you reached shore, where did you go when you reached shore?

A. With the help of people along the shore we were walked approximately 100 yards to motor vehicles and taken to a village, I presume it was Sandspit. [35]

Q. Did you receive attention there?

A. Yes, we did.

Q. Now you were able to walk when you left the water, is that right, or were you able to walk?

(Deposition of Donald E. Baker.)

A. We were forced to walk, there were only two people there and they couldn't carry seven of us. We were helped to walk, we couldn't have done it by ourself. [36]

* * * * *

Q. Starting from scratch, what was your condition when you were taken to the village by the people on the boat and people that assisted them on the shore line?

A. I was frozen up pretty badly. I could feel nothing in my legs or my hands or my arms.

Q. You were conscious?

A. I was conscious, yes. However, I needed assistance to [37] walk and I could not remove any of my clothing by myself, all of my clothing had to be removed for me.

Q. By the way, were you fully clothed in the water or were you partially disrobed when you entered the water?

A. I was in complete military uniform except for hat, overcoat and shoes.

Q. What medical treatment did you receive at the village or wherever you were taken after you were removed from the water?

A. Our formal medical treatment did not take place until approximately six hours after we were brought to the village. The doctor had been brought in for the purpose of observing us and doing what was needed for us.

Q. Did you receive medical treatment?

A. Yes.

(Deposition of Donald E. Baker.)

Q. What medical treatment did you receive?

A. As nearly as I can recall I received rub downs, some type of tablet to enable me to sleep. I believe that was about all except for being kept warmly wrapped with hot water bottles.

Q. Were you in any pain at any time while you were in the village? A. Yes.

Q. Would you describe the pain you experienced?

A. Apparently I had wrenched my shoulder at some time during [38] the experience and also my feet were very sore after they had thawed out from having walked across rocks in my bare feet.

Q. Do you recall how long you remained in the village approximately?

A. I believe that was already asked, 20 hours.

* * * * *

December 12, 1956

Cross Examination

Q. (By Mr. Koch): You are Donald Eugene Baker? A. Yes.

Q. Mr. Baker, this is the cross examination relating to the direct testimony that you gave last Saturday, December 8th, in this cause. The cross examination of which was deferred until today at this time. A. Yes.

Q. I might say, Mr. Baker, that the purpose of this examination is largely to clear up what few inconsistencies there appears to be between the testimony you gave Saturday and the testimony that

(Deposition of Donald E. Baker.)

you gave in previous statements and depositions in the same case. I assume [2] that I am doing a service for you and for all the parties in this case because it is pretty hard to keep these details in mind for so many years and so I am not doing anything more than helping you, if I can, to recall some of the circumstances where the testimony does vary a little. On direct examination, and when I say direct examination I am talking about last Saturday, you testified that when you boarded the aircraft that you did not recall having received any ticket or document issued by Northwest Airlines. You also testified that orders were cut directing you to proceed to Seattle. Do I understand then that you were provided with a military order? A. Yes.

Q. What did the orders contain?

A. The orders normally contain the name, rank, serial number, your destination, your current station, the purpose of the orders and that in many cases will specify the type of transportation to be used.

Q. Now in this case what did it show as your present station?

A. At that time, as near as I can recall those orders had me stationed at the air base at Tachikawa on temporary duty from my regularly assigned outfit in Korea.

Q. Well, in that respect were those orders correct? [3] A. Yes, as near as I can recall.

Q. And what do the orders show as your destination?

(Deposition of Donald E. Baker.)

A. The destination, as nearly as I can recall, a portion of the order stated I was to be returned to the Zone of Interior for the purpose of emergency leave by military air transport and that is about all I can recall of them.

Q. By the Zone of Interior, does that mean the Continental United States?

A. That is correct.

Q. And by military air transport, what do you understand that to refer to?

A. That is, as I understood it, any available military transport or contract carrier.

Q. And is that transportation arranged by some designated officer at your Base or American Base?

A. Yes, it was.

Q. In this case was it the transportation officer?

A. At that base at Tachikawa they had a regular unit for processing personnel from foreign zone to zone of interior and all personnel, regardless of rank, passed that processing unit. Exactly what it was called I don't recall.

Q. That processing unit arranged for your transportation from that base to the Continental United States? [4] A. Yes.

Q. Did your orders, or did the processing unit advise you how you would get from—specifically what means of transportation would be provided you?

A. Only that it would be air transportation.

Q. It would be air transportation?

A. That is all I knew at that time.

(Deposition of Donald E. Baker.)

Q. Did the orders tell you the place or point of departure and the time of departure?

A. The orders did not specify the place or the time. As I recall due to the nature of the emergency leave they specified first available transportation, air transportation.

Q. From Haneda?

A. At that time it was from Tachikawa to the zone of the interior.

Q. Were there flights leaving from Tachikawa to the zone of the interior?

A. That is a point that in going over, picking up my testimony Saturday, the flights were originating from Haneda. Most of my flying has been in and out of Tachikawa, that is how I got confused on that point.

Q. Then did your orders indicate your air transportation would originate at Haneda back to the zone of interior?

A. That I don't recall, whether it was specified Haneda or not. [5]

Q. Would your orders normally so specify?

A. Not normally. I have had occasion where I have been directed to proceed to a port of embarkation then maybe I would leave from another place in an approximate area, but not from the port of embarkation.

Q. Did the orders from the processing unit at Tachikawa serve as your ticket on to the plane back to the United States?

A. Yes, as near as I can recall.

(Deposition of Donald E. Baker.)

Q. Did you hand a copy of the orders to the civilian personnel on the airplane or at the airport?

A. I can't answer that question positively. I know I didn't hand a copy of the orders to anybody on board the aircraft; however, we did check in to a booth at the airfield and I don't recall whether I gave a copy of the orders, or showed my orders and at that time I was already listed on a manifest of some sort. I do recall them checking my name off as being ready to go. [6]

* * * * *

Q. Now on direct examination you testified that just prior to the time the plane landed in the water off Sandspit that it felt to you as though the plane had stalled, then went into the water and shortly before that you had explained briefly what a stall was, and that you were familiar with stalls and characteristics of stalls from your flying experience in the military service, do you recall that? [8]

A. Yes.

Q. Now in the deposition taken by the Civil Aeronautics Board at the St. Louis Depot March 19, 1952, relating to this same air disaster, you were asked about your experience with respect to stalls and aircrafts such as a C-54 or DC-4 which was involved in this accident. Do you recall saying, at that time, that you had never had any experience, that you had never experienced a stall in a C-54 even though you had been through many stalls in a B-24 bomber? A. Yes.

Q. And you further recall testifying that the

(Deposition of Donald E. Baker.)

flying characteristics of a C-54 and a B-24 are quite different? A. Yes.

Q. And that you further testified that your impression of a stall with respect to this flight was based on your experience of the similar feelings you had when you were in a larger type of plane, a B-24?

A. Well, it is not a larger type of plane. I don't believe it is much bigger than the C-54 but the answer is yes to that question.

Q. And further when you were testifying Saturday on direct examination on this subject you testified that you could feel and hear quite a vibration from the nose sector and it was then that [9] it felt to you as though there had been a stall, but the expression you used was quite a vibration, and I noted in describing this same situation in this St. Louis deposition you referred to this sensation as just a vibration, your words were "it seemed to me to be a meshing type of vibration, it was not a violent type of stall, that much I know." Do you recall that language? A. Yes.

Q. And it is true, is it not, this vibration was just quite momentary?

A. Could you elaborate on the period of time you mean as "momentary"? We probably weren't air-borne more than 15 or 20 seconds from the time we left the runway. The vibration from the nose, I would say, had a three or four second duration, as near as I can recall. I believe I further described

(Deposition of Donald E. Baker.)

that vibration as being similar to a broken Shimmy damper.

Q. Well, I was referring to the question with respect to whether it was a continued vibration where you said "whether that vibration continued on I cannot answer because I did hear the hydraulic pumps and it is possible that vibration just melted right in with the other things that were happening, the pilot trying to get the gear up, so I can't state positively it continued for any length of time." [10] That was the part I had reference to.

A. Everything was happening so fast there may have been a few seconds there but that part of it is a definite fact in my own mind, there was the vibration from the nose.

Q. On direct examination you testified Saturday to a four or five hour delay in Shemya due to what had been, you had been informed was generator trouble, do you recall that? A. Yes.

Q. In this St. Louis deposition and again I make reference to this because it is the only other background information I have on the matter, and it was so much closer to the time of this accident, your testimony was as follows: "We changed the generator at Shemya Air Base but it appeared to be a minor thing and naturally only took two and a half hours." Do you recall that?

A. I don't recall the exact time on that.

Q. Well, if that was your testimony at that time——

(Deposition of Donald E. Baker.)

A. I would say that was a much nearer estimate than my testimony on Saturday.

Q. And at that time you also said that you didn't recall which generator was affected, do you recall that, not that you said which one was affected Saturday but I am just bringing that out too. [11]

A. I don't recall pointing out which engine it was. I knew there was a generator change.

Q. But not which particular engine was involved?

A. That question I don't believe was pointed out Saturday.

Q. No, it wasn't. Saturday Mr. Riley asked you whether you recalled the hour at which your flight left Anchorage, Alaska, and you testified that it was late in the evening, 9:00 or 10:00 o'clock, and you were not sure and in your St. Louis deposition on the same point your testimony was as follows: "We took off from Anchorage around 6:30 p.m.," that is the only part of the testimony that refers to that.

A. The 6:30 p.m., time I am sure is the correct time there. We had a two hour time differential between there and the States.

Q. It was 6:30 p.m., Anchorage time?

A. As I recall it was about that time. I got confused on that several times because of the time change.

Q. Now I want to refer to Saturday's testimony referring to, I mean dealing with icing, the collec-

(Deposition of Donald E. Baker.)

tion of ice on the pilot's windshield and on that subject you testified Saturday that you had observed some ice collecting on the pilot's windshield and you described that ice accumulation as light. In your St. Louis deposition your testimony was substantially the same but you went on to [12] point out, "That the pilot felt that there was no particular harm in having lost that engine, referring to the engine that had been feathered; as a matter of fact shortly after we lost the engine he had accumulated a little bit of ice on his forward cockpit windows and he decided he would climb a little bit to see if he could get out of the region of ice, I forget the altitude. I know he did climb approximately a thousand feet or more to get out of this icy condition. The aircraft climbed very well on three engines." Do you recall that testimony? A. Yes.

Q. And isn't it true that when the elevation was increased a thousand feet the icing disappeared? A. That is right. [13]

* * * * *

Q. Saturday you testified when Mr. Riley asked you whether you were able to observe visibility as you approached the Sandspit landing that the visibility at that time was poor and you could not estimate the visibility in miles, do you recall that testimony? A. Yes.

Q. During the St. Louis deposition we asked about the visibility and you testified that from the one or two glances which you had of lights it ap-

(Deposition of Donald E. Baker.)

peared to be hazy, that you were able to see lights, [14] that upon landing there was no fog. Do you recall that testimony? A. Yes, I do.

Q. Well, then when you referred to the visibility as poor, does that relate in part to steam inside the windows, or where you sat, rather than what the conditions might be from where those charged with the operation of the plane observed conditions?

A. When I spoke of visibility I meant the outside visibility, not so much my visibility from the seat. I could see lights but it was hazy, does that answer your question?

Q. Yes, in other words, referring to seeing the lights in the haze and there was no foggy conditions described, at least what you had in mind when you say poor?

A. That is right, it wasn't an ideal condition.

Q. Saturday, in relating the final approach to the airport and the attempted landing you testified on direct examination that it appeared to you that the plane was landing high and fast and that the plane floated and didn't touch down for a period of time after coming to the first part of the runway, then the plane ran on the runway for five to ten seconds before the attempted takeoff was made. In your previous deposition on this subject I notice that you testified that you didn't know what the airspeed was on the final approach and [15] that you didn't know the plane's position relative to the runway, though you did see lights flash by. At that time you testified that you thought

(Deposition of Donald E. Baker.)

the plane was coming in pretty high but there was no testimony about floating. Now how about that prior testimony, I am referring to its accuracy compared to the testimony now about fast and floating which wasn't in your previous testimony?

A. I believe the floating portion of it is correct. I felt as he was killing his speed coming in high he was floating somewhat as large aircraft sometimes do on landing when you are trying to kill your speed rapidly.

Q. Well, with that explanation of floating do you now recall that you didn't testify or did testify you didn't know anything about the location on the runway or speed previously?

A. Do you recall how that question was phrased to me at that time?

Q. Yes, I will be glad to read it to you.

Mr. Riley: Would you read the statement where he said he knew nothing about the speed and position, I didn't understand the previous statement as stated.

Mr. Koch: Well, there isn't a question, the question was, "Shall I go on," then he just went on relating, this is all just a general narrative.

Q. I am going to read what he said—"As we [16] approached Sandspit the pilot notified me he was starting his descent and I proceeded to my seat in the cabin in the airplane. I was sitting in the third row of seats on the left-hand side of the aisle. The descent appeared to be normal. The pilot choose a right-hand descending pattern, there

(Deposition of Donald E. Baker.)

was a little bit of turbulence, I couldn't see whether it was clouds or what was causing it during the descent, but nothing unusual appeared. The descent was slow and took approximately 15 minutes. From my seat I could not tell exactly what the weather was at Sandspit but I do remember the pilot's comment in saying Sandspit was clear with occasional snow flurries. These reports came through radio communication with ground stations. As the airplane came in for the landing from the the movement of the airplane it felt to me as if he was coming in pretty high and attempted to drop in. The touch came down before he had completed his Flurr out and was pretty rough. I don't know what the air speed was on the final approach, I have no idea what our position was relative to the runway." Is that true?

A. Yes, that is true.

Q. A word more on that same point, do you recall January 20, 1952, that you gave a written statement relating to this accident at the McChord Air Force Base and at that time in your statement you made one statement as follows: "I do [17] not know the air speed on the final approach, the relative position of the aircraft to the runway at touchdown nor the air speed and altitude at time of stall over the water." Do you recall that?

A. Yes.

Q. Saturday when you referred to hearing what you thought to be the hydraulic gear, is that the same thing as the hydraulic pump? A. Yes.

(Deposition of Donald E. Baker.)

Q. Saturday when you were describing the situation immediately after the plane got into the water, Mr. Riley asked you how long the aircraft remained afloat—I think he rephrased the question to say did the airplane float or did it fill with water immediately, and you answered that the airplane started to settle in the water immediately. In connection with that I want to call your attention, your statement in the deposition in St. Louis where you said, “That the airplane gradually settled in the water.” Do you want me to read the testimony to refresh your recollection? A. No.

Q. Would you say it settled gradually?

A. Yes, it settled gradually but it began to settle immediately, that was the thing I perhaps didn’t make clear Saturday. [18]

Q. Am I right in concluding from the way you described how the nose was dipped down a little bit how the various parts of the plane came to rest, that it was in extremely shallow water?

A. Not extremely shallow water, you couldn’t wade in it. I don’t know exactly how deep it was, the residents at Sandspit said it was about 20 feet at that point.

Q. But am I right, do I understand you correctly that parts of the plane were touching bottom, the plane was on the bottom and parts of it stood up above the surface of the water like the wing that you stood on?

A. That is true, we found out at a later time, at least we were told.

(Deposition of Donald E. Baker.)

Q. You didn't know it then?

A. I didn't know it then. We didn't know whether it was going to go all the way under.

Q. Now Saturday there was a rather extended discussion of the life vests which I would like to go into a little bit. Isn't it true, Mr. Baker, that when the plane landed or crashed into the water off Sandspit and the lights went out that you immediately passed out life vests to a number of passengers in the plane, that you pulled them out of the seats ahead of you and seats behind you and the seats where you were and gave them to other people? [19]

A. Yes, I pulled them out of a curtained compartment above the seat.

Q. Not just on your own seat but other seats too?

A. What I could reach from my seat, I reached forward and backward.

Q. And you gave them out to a number of people? A. Yes, that is true.

Q. And you also told other people where the vests were located so they could get them out themselves in case they didn't know?

A. Well, I tried to tell people, it was rather noisy.

Q. And isn't it also true, Mr. Baker, that you saw passengers outside the plane with Mac West jackets on. A. No, I don't recall it.

Q. Let me see if I can refresh your memory. This is a question that was asked you in the St.

(Deposition of Donald E. Baker.)

Louis deposition, "You previously commented that you gave some Mae Wests to several passengers during the time prior to your being rescued, do you recall whether any of these persons may have donned these Mae Wests?" Answer: "That I cannot state. I do know there were one or two who came out of the airplane with Mae Wests. In talking to them afterwards when they stepped out and hadn't put them on inside fell into the water and they lost them." Do you recall that testimony? [20]

A. Yes, I recall that.

Q. Some other people did have the vests outside the plane that you didn't see, that had them on?

A. That is true. I can't say definitely that other people had them. One or two people mentioned having lost them, whether others actually had them I can't say.

Q. You said, "I do not know, there were one or two who came out of the plane with Mae Wests."

A. But not with Mae Wests on.

Q. You don't know whether they had them on or not?

A. They didn't apparently at the time I talked to them. Could I make a point here concerning this—I doubt if any of the passengers besides myself would have had any reason to believe they were in water when we crashed. That probably explains why probably quite a few of them didn't come out with Mae Wests.

Q. Now isn't it true, Mr. Baker, that you testified previously that this was a new type of Mae

(Deposition of Donald E. Baker.)

West life jacket or life vest? A. Yes.

Q. When you testified that you had trouble figuring out how this particular one worked, is that largely due to the fact it was pitch dark and you were having a little trouble knowing what part of it you were holding on to, I mean it would be hard? [21]

A. Yes, that is true; however, the Mae West which I was accustomed to I could put on in the dark without any trouble at all.

Q. But if this had been light so you could see what you were doing you wouldn't have had any trouble putting this one on, would you?

A. Probably not.

Q. As a matter of fact, you got the vest on wrong, you got your arm through the head hole or something like that, didn't you? A. Yes.

Q. And the vest worked all right but I mean it wasn't on just the way it should have been?

A. That is true.

Q. It was a CO₂ type, not the Kapok type?

A. No, it was a CO₂.

Q. Are the newer ones that chemical type?

A. Well, all of the ones I had ever used were CO₂.

Q. Do you remember Saturday, Mr. Baker, when you testified that the literature which the airline gave you on emergency procedures, donning the life rafts and so forth, was put on each seat, that is where you found it, on each seat?

A. Yes, I believe that is what I said.

(Deposition of Donald E. Baker.)

Q. I noticed in the St. Louis deposition you [22] testified that the booklet describing these emergency procedures were handed to each passenger, it is sort of a minor point.

A. I would say the St. Louis testimony is correct on that point.

Q. Just one other point, you mentioned that you came back from Sandspit to McChord Field on the Northwest Craft, you are talking about a Northwest Airlines plane? A. Yes.

Mr. Koch: I think that concludes my cross examination, do you have any redirect? [23]

* * * * *

[Endorsed]: Filed March 11, 1957.

[Title of District Court and Causes.]

DEPOSITION OF RICHARD PONTIUS FIELDS

taken on behalf of the defendant, at Suite 530, 548 South Spring Street, in the City of Los Angeles, California, commencing at 2:30 o'clock p.m., on the 4th day of March, 1957, before John J. Rabasa, a notary public in and for the County of Los Angeles, State of California, pursuant to the annexed Notice.

Appearances: For the Plaintiff: None. For the Defendant: Messrs. Karr, Tuttle & Campbell; by Messrs. Crider, Tilson & Ruppe, by James Edward Kelly, Esq., 548 South Spring Street, Los Angeles, California. [2]

RICHARD PONTIUS FIELDS

called as a witness by and on behalf of the defendant, having been first duly sworn, was examined and testified as follows:

Direct Examination

Q. (By Mr. Kelly): Will you state your full name, please?

A. Richard Pontius Fields.

Q. How do you spell the middle name?

A. P-o-n-t-i-u-s.

Q. What is your present address?

A. 6414 North Barela Avenue, Temple City, California.

Q. Mr. Fields, do you have any present intention of going to the State of Washington within the next ten days? A. I do not.

Q. Your permanent residence is here in Temple City, Los Angeles County, California?

A. That is correct.

Q. Where are you employed, sir?

A. The Southern Pacific Company in Santa Ana.

Q. Santa Ana, California?

A. Santa Ana, California.

Q. What is the nature of your work there?

A. I am in the freight traffic department. [3]

Q. Mr. Fields, I don't know whether you have had any previous experience in the past by way of a deposition, but let me point out to you just a few things regarding this procedure. [4]

* * * * *

(Deposition of Richard Pontius Fields.)

Mr. Fields, how old are you at the present time?

A. Twenty-eight.

Q. This deposition today concerns an accident and incident that happened back in January of 1952. Do you recall an incident involving an airplane at approximately that date? A. I do.

Q. What was your occupation just prior to this accident in January, 1952?

A. I was in the United States Army.

Q. What rating or rank did you have in the Army at this time?

A. Sergeant First Class.

Q. Do you know the exact date when the accident occurred? A. January 19, 1952.

Q. Prior to the accident you had been a passenger in the plane? A. That is correct.

Q. Where had you started the trip or flight from that eventually ended up where the accident occurred?

A. It commenced in Tokyo, Japan.

Q. I assume that had been a day or two previously, was it?

A. That is correct. [6]

Q. Where was the last stop that was made before the accident or rather the last landing of the plane, do you recall that?

A. Anchorage, Alaska.

Q. What is the first thing that occurred after leaving Anchorage, Alaska, that indicated there was some difficulty with the plane?

A. The feathering of the No. 1 engine.

(Deposition of Richard Pontius Fields.)

Q. That would have been approximately how long after you left Anchorage, Alaska, that is, how much time elapsed after you left Anchorage, Alaska?

A. Between two and three hours after departure at Anchorage.

Q. How did you know that there was trouble with an engine on the plane?

A. Because a crew member examined the No. 1 engine by flashing a flashlight through the porthole on the engine.

Q. What did you see at that time?

A. The feathering or stopping of the outside port engine.

Q. What was the next thing that was done after this indication that one of the engines was in difficulty or stopped or was feathering or whatever it had been doing?

A. The flight proceeded for approximately an hour and a half before indication of landing was [7] made visible by a descent and also the flashing of "Fasten seat belts" and "No smoking" sign in the forward part of the passenger compartment.

Q. Do you recall approximately how many passengers there were on the plane?

A. There were approximately 40 passengers aboard the plane.

Q. What did they have in the way of a crew as far as you could tell?

A. They had a pilot, a co-pilot and a stewardess.

Q. Is there anything that you recall in particular that the stewardess did after you left Anchor-

(Deposition of Richard Pontius Fields.)

age, up to the time of the accident? A. No.

Q. Had you been on this same plane from the time you left Tokyo, Japan, up until the time of the accident? A. That is correct.

Q. You didn't change planes anywhere enroute?

A. It was the same plane.

Q. When the flight left Tokyo was there any procedure or type of instructions that were given?

A. Pertaining to what, sir?

Q. Pertaining to any part of the passengers' duty or advising them or instructing them in the event of any unforeseen conditions or circumstances arising?

A. There was a booklet on the seat at Tokyo [8] that gave instructions on how to prepare yourself for ditching or emergency landings in the water, also how to put on your safety paraphernalia or life jacket, also the location of the life jackets in the particular aircraft that we were aboard.

Q. You say there was one of these booklets on each seat; is that correct?

A. Yes. There was a booklet on each passenger's seat.

Q. Did you read the booklet after the plane left Tokyo?

A. I read the booklet while the plane was at Tokyo.

Q. I believe you said that it was not until about an hour and a half, something like that, after the

(Deposition of Richard Pontius Fields.)

first notice of engine trouble the plane started to descend for a landing, did it?

A. That is correct.

Q. You could tell that because of the decline of the plane and also the flashing of the sign to fasten seat belts and no smoking; is that correct?

A. That is correct.

Q. What was the general condition of the weather, as far as you could tell, when the landing started, were you able to determine by looking out or any other method as to the nature of the weather at that time?

A. The visibility from the aircraft from my [9] particular seat was not too good because of a frosted condition on the portholes.

Q. You couldn't tell then at that time whether it was raining or snowing outside?

A. I could not.

Q. I assume, also, that you couldn't tell very well the nature or the degree of the temperature outside of the plane at that time?

A. That is correct.

Q. Anyway, with the frosted portholes it indicated that it was probably pretty cold outside; is that right? A. Yes.

Q. Now, can you describe to us in your own words, as best you can, just what happened when you landed, when the plane finally landed?

A. When the plane made its approach towards the runway the first touch down was rather hard in comparison to the other landings experienced

(Deposition of Richard Pontius Fields.)

on this flight. The plane was air borne immediately after touching down. It again touched the ground, this time more violently than the previous time which occurred within seconds before. There was then a definite indication that the plane was going to try another approach for the landing, the reason being full power was applied and a definite upswing indicating takeoff was evident through experience of other flights. [10]

Q. Then what happened?

A. We were air borne for approximately two minutes when a left bank was felt and shortly afterwards in the course of seconds an impact to the plane of severe violence was felt.

Q. By the way, at the time that this landing was first started, and after you observed that one of the engines was feathering or stopped, what was the condition of the visibility, as far as daylight or darkness?

A. It was dark.

Q. Fully dark? A. Yes.

Q. Do you have any idea of the approximate time?

A. Late p.m. or early a.m.

Q. Somewhere around midnight?

A. Somewhere in the vicinity of midnight.

Q. I believe you said there was a left bank and then there was a violent crash; is that right?

A. That is correct.

Q. What happened then?

A. The impact was on the left wing dipping or being caught in the water. The plane made a for-

(Deposition of Richard Pontius Fields.)

ward lunge to the right pulling my seat loose from the fuselage.

Q. Were there any lights inside the plane as this landing was being attempted?

A. There were the normal lights that are on in a landing, yes. [11]

Q. They were burning?

A. Yes, that is correct.

Q. What happened then when this crash occurred?

A. When the crash occurred, why, all the lights went out.

Q. So there was absolutely no lighting inside the plane at all?

A. It was completely dark.

Q. What happened next, as far as you can recall, after the crash and the lights going out?

A. Confusion; people trying to find their way out of the airplane, a seepage of water on the floor of the fuselage and then the emergency hatches being opened.

Q. Do you know who opened them?

A. I do not.

Q. Did you see any of the crew members after the crash?

A. Yes. One of the crew members opened the compartment forward of the passenger compartment and asked if there were any persons injured.

Q. Did anyone say anything in response to that?

A. There was confusion and I did not determine if anybody answered him directly or not.

(Deposition of Richard Pontius Fields.)

Q. You don't recall hearing anybody say that they were injured at that time? A. No. [12]

Q. What else did the crew member do?

A. He had a flashlight and had shone it in the fuselage to determine, I believe, the damage or to make an inspection for himself to see if anybody had been injured in the crash.

Q. Did he shine the flashlight around the inside of the fuselage? A. Yes, he did.

Q. What did you do then with regards to your own efforts?

A. I took two of the life preservers from the designated area and gave one to my brother Charles and kept one myself.

Q. Where did you find the life preservers?

A. Above the seats as indicated in the pamphlet that I read at Tokyo.

Q. Were there any markings on the cases or containers or whatever the life preservers were held in?

A. The life preservers were in permanent containers over the seats and the containers had markings on them indicating that they contained life preservers.

Q. Both you and your brother Charles obtained a life preserver; is that correct?

A. That is correct.

Q. After you got your life preserver on, [13] Mr. Fields, what did you do?

A. I did not put my life preserver on.

Q. What did you do with it?

(Deposition of Richard Pontius Fields.)

A. I held it in my hand as I went out of the emergency hatch and upon reaching the outside I stepped off the back of the starboard wing and went under water, and at that time I lost my life preserver.

Q. Then what did you do? First, let me ask you this: When you went under water, how deep into the water did you get, to your waist, your shoulders or over your head?

A. I went under water above my head; how deep, I cannot determine.

Q. In other words, you were totally submerged?

A. That is correct.

Q. At that time you lost your life preserver?

A. At that time I lost my life preserver in trying to get above water, get my head above water.

Q. Then what did you do when you finally got your head above water?

A. I swam back to the wing and got up on the wing and crawled to the point or outside of the wing to accompany my brother.

Q. Which wing would that have been?

A. On the starboard or right wing.

Q. About how many of you finally ended up on the starboard wing? [14]

A. The ultimate number of seven survivals were all taken from the starboard wing.

Q. In other words, all those that were fortunate to survive were all on the starboard wing?

A. That is correct.

(Deposition of Richard Pontius Fields.)

Q. How long were you on the starboard wing, as best you can estimate?

A. Approximately an hour and a half total.

Q. Then what happened?

A. We were picked up by two men in a small rowboat with an outboard motor and were taken to shore by holding onto the outside of the small craft.

Q. Could you tell us approximately how far off shore this airplane was?

A. I would say in the vicinity of one mile. [15]

* * * * *

Q. Did you operate any of the life preservers yourself, in view of the fact that you lost yours when you went into the water?

A. I did not.

Q. After you got up on the starboard wing, did you notice any of the other passengers with life preservers?

A. Several of the passengers had preservers on.

Q. Did your brother Charles have one on or did he have one?

A. He had one that was given to him by me immediately after the crash. However, to my understanding, he gave it to another passenger who could not swim.

Q. Do you happen to know or did you have any indication of the degree of the temperature after you left the plane and got out on the wing?

A. The water was cold enough to create a numbness in my limbs immediately afterwards.

* * * * *

(Deposition of Richard Pontius Fields.)

Q. What was the outside temperature, the weather temperature?

A. The weather temperature must have been in the vicinity of 32 because of snow falling immediately after the crash and staying visible on the survivors and the aircraft that was not submerged in the water.

Q. You recall being towed into shore by this [16] outboard motorboat and I would assume that you were taken someplace ashore for care; is that correct?

A. That is correct.

Q. Then where were you finally taken and how soon afterwards?

A. We were taken by Northwest to McChord Air Force Base within 24 hours after the crash.

Q. You were taken by another plane to McChord Air Force Base?

A. That is correct.

Q. McChord Air Force Base is where?

A. Near Seattle.

Q. Did you finally thaw out then after you arrived at McChord Air Force Base?

A. We were taken—the survivors were taken to the crash ward of McChord Air Force Base and at that time I indicated to the Air Force doctors that examined us that I had a numbness in my limbs and they explained this as frostbite of a degree, and some medication was performed, of what nature I am not familiar.

Q. How long did you convalesce?

A. One day.

Q. How long was it after the crash before you

(Deposition of Richard Pontius Fields.)

were completely free of any symptoms of this experience?

A. I was aware of this numbness in my limbs for many months when exposed to either extreme [17] cold or heat, either in the nature of air temperature or water temperature.

Q. Could you say how long approximately?

A. It is hard to say. I would say at the extreme a year.

Q. But the only time that you noticed it is when you were exposed to extreme temperatures?

A. That is correct.

Q. So by the end of the year 1952, roughly, were you pretty well and completely recovered from any effects physically from this incident?

A. Yes.

Q. Since then, say, starting in from the period of January 1st, 1953, up to this date, have you suffered any physical difficulties that you can attribute in any way to this accident? A. No.

Q. I take it, then, that when you were unable to see out of the plane during the landing and from your experience after you were rescued, that you never had an opportunity to observe the field in which the landing was attempted?

A. I was able to observe the condition of the same field, Sandspit, when departing on the other aircraft or the rescue aircraft the following night.

Q. What was the condition that you observed [18] that night when you departed for McChord Air Force Base?

(Deposition of Richard Pontius Fields.)

A. The runways, from a layman's point of view, not being an aviator, they were in good shape. However, the snow was banked from the runways to the sides making the runways below the surface of the snow. [19]

* * * * *

[Endorsed]: Filed March 12, 1957.

[Endorsed]: No. 15670. United States Court of Appeals for the Ninth Circuit. Northwest Orient Airlines, Inc., Appellant, vs. Geraldine B. Gorter, as Administratrix of the Estate of John M. Wal-drep, deceased, Appellee. Transcript of Record. Appeal from the United States District Court for the Western District of Washington, Northern Division.

Filed: August 16, 1957.

/s/ PAUL P. O'BRIEN,
Clerk of the United States Court of Appeals for
the Ninth Circuit.

In the United States Court of Appeals
for the Ninth Circuit

No. 15670

NORTHWEST ORIENT AIRLINES, INC.,
Appellant,
vs.

GERALDINE B. GORTER, as Administratrix of
the Estate of John M. Waldrep, Deceased,
Appellee.

STATEMENT OF POINTS ON WHICH
APPELLANT INTENDS TO RELY

Appellant hereby adopts as its statement of points on which appellant relies in this Court, the statement of points filed by appellant with the Clerk of the United States District Court for the Western District of Washington, Northern Division, and which is a part of the Record on Appeal in the above-entitled cause.

Dated this 22nd day of August, 1957.

KARR, TUTTLE & CAMPBELL,

/s/ By COLEMAN P. HALL,
Attorneys for Appellant.

Acknowledgment of Service Attached.

[Endorsed]: Filed August 24, 1957. Paul P. O'Brien, Clerk.

